

UNIVERSAL
LIBRARY

OU_148556

UNIVERSAL
LIBRARY

OSMANIA UNIVERSITY LIBRARY

Call No. 332.4/E.35 T Acquisition No.

Author *Einzig, Paul.*

Title *International Gold Movement.*

This book should be returned on or before the date last marked

BY THE SAME AUTHOR

**THE BANK FOR INTERNATIONAL
SETTLEMENTS.**

SECOND EDITION

Pp. xiv + 243.

Price 10s. 6d.

**THE FIGHT FOR FINANCIAL SUPRE-
MACY.**

SECOND EDITION

Pp. xii + 144.

Price 7s. 6d.

THE WORLD ECONOMIC CRISIS.

Pp. xii + 165.

Price 7s. 6d.

INTERNATIONAL
GOLD MOVEMENTS



MACMILLAN AND CO., LIMITED
LONDON • BOMBAY • CALCUTTA • MADRAS
MELBOURNE

THE MACMILLAN COMPANY
NEW YORK • BOSTON • CHICAGO
DALLAS • ATLANTA • SAN FRANCISCO

THE MACMILLAN COMPANY
OF CANADA, LIMITED
TORONTO

INTERNATIONAL GOLD MOVEMENTS

BY

PAUL EINZIG

AUTHOR OF "THE BANK FOR INTERNATIONAL SETTLEMENTS," "THE FIGHT
FOR FINANCIAL SUPREMACY," ETC.

SECOND EDITION ENLARGED

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON

1931

COPYRIGHT

First Edition, 1929

Second Edition Enlarged, 1931

PRINTED IN GREAT BRITAIN

BY R. & R. CLARK, LIMITED, EDINBURGH

PREFACE TO THE SECOND EDITION

THE two years that have elapsed since the publication of the first edition of this book have witnessed many interesting changes in the sphere of international gold movements. The hopes that conditions would soon become normal have failed so far to materialise; in fact, there has been a distinct setback in the process of the international redistribution of gold, as a result of the cessation of American lending abroad, and of the hoarding of gold by France. Although a number of countries have stabilised their currencies on a gold basis during the last two years, on the other hand, the world crisis compelled several important countries to suspend the operation of the system. The extent of abnormal influences interfering with the international exchanges, and tending to bring about abnormal gold movements, has increased considerably. The political factor has assumed great importance in gold movements since 1929, while abnormal international transfers of funds and the discrepancy between price levels in various countries have provided additional disturbing factors.

Apart from new developments in fundamental tendencies affecting gold movements, the last two years have witnessed many changes of a technical nature affecting the working of the post-war gold standard, and altering the gold points of most exchanges. Far from having settled, gold points are now exposed to more frequent changes, and are more difficult to ascertain, than ever before. The activities of central banks on the domain of gold shipments, and the establishment of a gold clearing system by the Bank for International Settlements, have created a new situation, while recent developments have considerably affected London's position as a gold centre.

All these changes have made it necessary to make a thorough revision of most Chapters and Appendices; moreover, six new chapters have been included in this new edition. Chapter IV. is devoted to the political factor in international gold movements; the effect upon gold movements of the discrepancy between the price levels of various countries, caused by the choice of an arbitrary level for the stabilisation of their currencies, is explained in Chapter VI.; Chapter VII. deals with the influence of abnormal international transfers of capital; Chapter X. discusses gold shipments undertaken by central bank and the International Bank; in Chapter XII., the situation created in 1930 by the refusal of the Bank of France to accept the delivery of bar gold of a fineness inferior to .995 is

discussed, while Chapter XIII. surveys recent developments affecting the London gold market.

Owing to the changes that have taken place in practically every item of the cost of shipment, the calculation of the gold points of the principal exchanges had to be revised.

Part of the new material included in this Edition was published originally in articles appearing in the *Economic Journal*, and in the daily "Lombard Street" column of the *Financial News*. The author wishes to thank the Editors of these publications for their permission to reproduce them here.

P. E.

20 BISHOPSGATE, E.C.2,
July 1931.

NOTE

At the moment when this book is going to Press, the British Government has decided, under the pressure of the abnormal factors described in the new chapters added to this edition, to suspend the gold standard. There is no reason to believe, however, that the result of this would be the complete abandonment of the gold standard all over the world. It seems highly probable that Great Britain will return to a gold basis sooner or later on a lower parity, and that, on the basis of the experience of the last few years,

adequate international arrangements will be made to eliminate the abnormal disturbing factors. Meanwhile, gold movements to and from London will be confined to special transactions between central banks and to transactions arising from the sale of South African gold which will continue to be dealt with in London. The resumption of normal gold movement is, however, only a question of time.

P. E.

September 21, 1931.

PREFACE TO THE FIRST EDITION

THE aim of the present book is to deal with international gold movements mainly from a practical point of view. It is the first book devoted exclusively to this subject, and the first attempt to go into its technical details, especially as regards gold points of the principal exchanges since the war. The information it contains has been collected by the author in the course of his six years' experience as Foreign Editor of *The Financial News*, by means of direct contact with bankers, foreign exchange dealers, and bullion brokers. The author wishes to express his gratitude to the great number of experts who have been of assistance to him, but the nature of a great part of the information published makes it impolitic for him to disclose its sources.

Part of Chapter VI. has been published in the March, 1927, September, 1927, and December, 1928, issues of *The Economic Journal*, and in the December, 1927, issue of *The Banker*, while small parts of most chapters appeared anonymously in the "Lombard

Street" column published daily by *The Financial News*. The author wishes to thank the Editors of these publications for authorising their reproduction. His thanks are also due to Mr. F. Whitmore, B.Com., for his assistance in the revision of the proofs.

P. E.

20 BISHOPSGATE, E.C.2,

March 1929.

CONTENTS

	PAGE
CHAPTER I	
INTRODUCTORY	1
CHAPTER II	
COMMERCIAL TRANSACTIONS	12
CHAPTER III	
SPECIAL TRANSACTIONS	22
CHAPTER IV	
POLITICAL GOLD MOVEMENTS	31
CHAPTER V	
CAUSES OF GOLD MOVEMENTS	38
CHAPTER VI	
PRICE LEVELS AND GOLD MOVEMENTS	44
CHAPTER VII	
CAPITAL TRANSFERS AND GOLD MOVEMENTS	49
CHAPTER VIII	
EFFECTS OF GOLD MOVEMENTS	59
CHAPTER IX	
GOLD POINTS	69

CHAPTER X

GOLD POINTS AND CENTRAL BANKS	*PAGE 79
---------------------------------------	-------------

CHAPTER XI

STATISTICS OF GOLD MOVEMENTS	90
--------------------------------------	----

CHAPTER XII

FINE GOLD v. STANDARD GOLD	101
------------------------------------	-----

CHAPTER XIII

THE LONDON GOLD MARKET AFTER THE WAR . .	111
--	-----

CHAPTER XIV

THE POST-WAR GOLD STANDARD	123
------------------------------------	-----

CHAPTER XV

FUTURE OF GOLD MOVEMENTS	136
----------------------------------	-----

APPENDICES

I. GOLD POINTS OF THE PRINCIPAL EXCHANGES .	145
II. OPEN MARKET GOLD'S IMPORT AND EXPORT POINTS	160
III. COST OF GOLD TRANSPORT BY AIR	162
IV. BANK OF ENGLAND'S GOLD TRANSACTIONS ON FOREIGN ACCOUNT	163
V. GOLD IMPORTS AND EXPORTS	165
VI. ORIGIN AND DESTINATION OF GOLD IMPORTS AND EXPORTS SINCE 1925	167

CHAPTER I

INTRODUCTORY

SINCE the restoration of the gold standard in this country in 1925, international gold movements have attracted considerable attention, not only among theoretical economists and practical cambists, but also among the general public. Doubtless, this is due in part to a general increase of public interest in economic and, more particularly, monetary problems. Before the war our monetary system worked, comparatively speaking, fairly smoothly, and, for this reason, most people, apart from a small circle of experts, were inclined to ignore its very existence. Since 1914, however, monetary developments have left their mark on almost every aspect of everyday life, compelling the interest of the man in the street. Hence events relating to currency have been followed with much greater interest than before the war. As international gold movements have always played an important part in the working of our monetary system, it is only natural that they should have received their due share of this increased attention to monetary affairs.

In addition, there have been several special reasons why public attention has been focussed to an unusual extent upon international gold movements. Apart from a few short periods following the dis-

covery of new goldfields, gold has always been considered to be comparatively scarce. Its scarcity has become, however, particularly accentuated since the return of a number of countries to the gold standard during the last few years. The price level remained for years 40 to 50 per cent above its pre-war average. Other things being equal, this would have increased the requirements of gold for the purpose of note cover to a corresponding extent. In reality, the increase of the note circulation was, in many countries, in excess of the ratio of the increase of prices. Thus the cover of the note circulation, on the basis of the pre-war ratio of gold reserve, would have required a much larger amount of gold than before the war.

The basis of the reserve ratio itself has also changed in such a way as to necessitate more gold. Before the war the legal minimum of gold cover in countries with a gold standard was fixed on the basis of the amount of the note issue. According to a principle that has become increasingly popular since the return of a number of countries to the gold standard, the reserve ratio is now calculated on the figure of the note issue plus sight liabilities. This principle has been embodied in the banking legislation of several countries, and the tendency points towards its general adoption. An additional factor is the introduction of the gold standard in several countries which were on a silver basis or had an inconvertible paper currency before the war, or in which silver coinage played a restricted part. To mention one example, the complete demonetisation of silver in countries which formed part of the Latin Monetary Union has increased the gold requirements of those countries.

Admittedly, the supply of gold available for meet-

ing the increased requirements has also increased. Apart from the natural growth of the gold stock not required for industrial consumption, the withdrawal of gold coins from circulation has also contributed to an increase of the total stock available for reserve requirements. The coins which are still in circulation are gradually finding their way into the vaults of the central banks, while the minting of new coins for active circulation is confined to a small number of countries. Most countries returning to a gold basis are adopting the gold bullion standard, and some of them are even content with the gold exchange standard. The statutes of several central banks admit the inclusion of a certain percentage of foreign exchanges in the note cover. This measure is regarded, however, as temporary, in almost every case, and most central banks aim at accumulating a gold reserve large enough to cover the note issue without the inclusion of foreign exchanges. With this object in view they are gradually converting their foreign currencies into gold even if their stocks exceed the ratio prescribed by their statutes.

Allowing for all these considerations, it is safe to assume that, on balance, the demand for gold for monetary purposes has increased to a greater extent than the amount of the world's visible supply. In addition, the discrepancy has been particularly accentuated by the changes in the distribution of gold that have taken place as a consequence of the war. While some countries—such as the United States and France—have a large supply beyond their requirements, other countries have been unable to replenish their gold stock depleted during and since the war. Several countries with an excessive stock, such

as Spain, for example, are reluctant to part with their surplus, and though their currency is still inconvertible, they endeavour, in fact, to increase their gold holdings. Thus, the entire burden of the exceptional demand in excess of current production has to be borne by the few countries possessing a free gold market.

In the course of the nineteenth century the adoption of the gold standard in the greater part of the civilised world was a gradual process. The requirements thus created were easily met in consequence of the new gold discoveries which practically coincided with the establishment of the gold standard in most countries. On the other hand, the restoration of the gold standard after the war has been sudden. Within six years more countries have adopted the gold standard than during the whole of the nineteenth century. There has been a real "gold rush", though in an inverted sense of the term. Some of the countries returning to a gold basis possessed, it is true, an adequate stock of gold, and even a surplus, and appeared in the international market as sellers of gold rather than buyers. This was so in the case of the Scandinavian countries and Holland. Most other countries, however, had to increase their gold reserve in order to be able to restore and maintain the gold standard. On this occasion there has been no coincident increase of production to meet the exceptional demand which has been much more urgent and impatient than at any time in history. As production is practically stationary, and the withdrawal of coins from circulation is a slow and declining process, the urgent requirements of one country can only be met out of the resources of other countries. The gain of one central bank is almost inevitably the loss of another central bank.

According to a popular theory, the gold which was accumulated in certain countries after 1914 is bound to be "redistributed" and the *status quo* will thus be restored. This belief, together with many other misconceptions according to which the restoration of normal conditions necessitates the return to pre-war conditions, is unacceptable. There is little likelihood of redistributing the gold hoarded by some countries, for the simple reason that its new owners are not prepared to part with the greater part of their acquisition. The United States is practically the only country which does not object if heavy withdrawals of gold reduce, up to a certain point, its excessive gold reserves. It is a mistake, however, to imagine—as many European experts do—that either the American authorities, or the banking interests, or the public, are anxious to lose gold. When, in the course of 1928, the efflux assumed large proportions, the American Press began to show signs of uneasiness, and American experts discovered that, after all, they could not afford to lose as much gold as they had imagined, without provoking a contraction of credit. It is admittedly true that the Federal Reserve Bank parted with large amounts of gold freely, without making any attempts to check the efflux. In fact, it has even encouraged shipments whose destination it approved. But this attitude was due, not to any desire to get rid of its surplus, but to its policy aiming at a contraction of credit in order to check the Wall Street boom. It is likely to continue to maintain a liberal attitude towards foreign demand so long as its big surplus is not absorbed by an increase of domestic requirements, either through economic and financial expansion, or through some

emergency. Unquestionably, the United States requires to-day a larger gold reserve than in 1914. It is impossible to foresee how far its requirements will further develop, and the authorities are therefore desirous to retain an ample margin of surplus gold in anticipation of future developments.

The same holds good, though perhaps to a less extent, in the case of other countries which increased their gold stock during and after the war. The economic activities of Japan and Argentina, for instance, have expanded considerably, so that the monetary requirements of these countries are now greater than before the war. As for France, the second largest holder of gold, there is no reason to suppose that she would depart from her traditional policy of discouraging an efflux of gold. In possession of a huge foreign exchange reserve, she is well in a position to prevent a reduction of her gold stock.

Apart from the United States and France, most countries work on a relatively narrow margin, and are sensitive to comparatively moderate withdrawals, which tend to produce a marked effect upon their credit situation. That, in turn, is bound to affect everyday life. An increase of the Bank Rate, provoked by the withdrawal of gold, affects every section of the community. This explains the great interest with which the man in the street follows international gold movements.

The change in the character of the gold standard has also increased the importance of international gold movements at the expense of domestic gold movements. During the nineteenth century, gold played a dual part in the monetary system of this country. It fulfilled an approximately equally im-

portant task in domestic circulation and in international relations. Already before the war there was a definite tendency towards the diminution of the internal rôle of gold, and towards an increase of its international rôle. Since the war, Great Britain and several other countries have adopted a monetary system in which gold has practically ceased to play any part in the internal monetary sphere. The Currency and Bank Notes Act of 1928 has dealt a final blow at the internal monetary use of gold in this country. The object of clause 11, empowering the Bank of England to buy any amount of gold held in this country in excess of £10,000, provided that it is not wanted for *bona-fide* industrial or export requirements, is to concentrate in the hands of the central institution all gold available in the country for monetary purposes, so as to provide for the requirements arising from the international monetary use of gold. While before the war the domestic gold transactions of the Bank—the issue and withdrawal of sovereigns to and from internal circulation—were of some importance, at present they are insignificant as compared with international gold movements. They are confined to the sale of small amounts of bar gold for the requirements of the home trade, whenever the supply available in the open market does not cover these requirements, and to the gradual withdrawal of sovereigns hoarded by the public, through the channels of the joint-stock banks. The relative importance of internal gold movements will continue to decline as a result of the reduction of the amount of sovereigns still held outside the central bank.

The novelty of free gold movements in changed circumstances has also added to the general interest in

gold influx and efflux. The arrival of the first gold consignment since the war from the United States to this country at the end of 1927, was an event of great interest to a generation which had become accustomed to witness only westward gold movements, while the first French gold shipment in an outward direction had a similar claim to notoriety. The atmosphere of secrecy and mystery that surrounds many gold transactions incites the curiosity of a public which would otherwise take little interest in them. The "Unknown Buyer" of gold looms large in popular imagination, competing for popularity with the "Man with the Iron Mask", or the "Mystery Man of Europe". There is much more mystery about gold movements than there was before the war. At the same time, more attention has been called to it by campaigns demanding more information about gold movements. Even the popular Press has taken an interest in gold shipments, to which prominent headlines are often devoted.

From the point of view of economic theory, it is extremely interesting to watch the working of the changed system in the changed circumstances. Before the war the meaning of the gold standard was clearly defined, and the conditions in which it worked were practically settled. The exact meaning of the post-war gold standard, on the other hand, is still undecided. Its criterion, limitations, scope, and spirit have not yet had the opportunity to become crystallised during the short period that has elapsed since the system came into operation. To quote only one example, the meaning of the freedom of gold markets is interpreted in an entirely different sense than before the war. It is understood that central banks them-

selves are not at liberty to take advantage of this freedom without the consent of the other central banks involved. It will take the experience of a number of years before a code of rules governing the system is once more clearly defined. Meanwhile, the problems arising in connection with international gold movements deserve particular attention, as their solution will largely contribute to the evolution of the post-war conception of the gold standard. The conditions in which the system works are subject to considerable and frequent changes. From time to time new situations arise, and the conclusions reached on the basis of pre-war experience and of the short post-war experience require frequent reconsideration and amendment. Very often, points of a purely technical nature lead to substantial modifications of fundamental principles, or at least to debates which contribute to clarify the situation. There are occasional test cases—such as, for instance, the Midland Bank's gold imports in 1928 with disregard of loss of interest—the outcome of which is determined by the attitude of the authorities and the experts, and sometimes of the Press and public opinion.

From the point of view of bankers, the practical significance of international gold movements has increased considerably. The possibility of earning a profit on arbitrage has increased, though it should not be overrated. In the majority of cases the margin of profits on gold shipments is nominal, and unforeseen circumstances often convert the anticipated profit into a loss. The main reason why bankers have to keep a watchful eye on international gold movements is, not so much the possibility of a direct profit that can be derived from such operations, but their effect upon the markets.

The volume and frequency of gold movements is rather greater than before the war, and tends to affect the Money Market, Foreign Exchange Market, and Stock Market to a greater extent than in pre-war days.

From the point of view of industrial and commercial interests, the importance of gold movements has also increased. As we work on a narrower margin than before the war, and the extent of gold movements is greater, their influence upon rates of interest and the supply of credit is now much greater than prior to 1914. The daily bullion bulletins of the Bank of England are now being watched, consequently, also by business circles outside the City with much greater attention. As anything that affects the business situation also affects employment, even the working classes are bound to take a greater interest in gold movements. International gold shipments tend to affect the cost of living to a greater extent than before the war and attract therefore the attention of consumers.

Gold movements deserve attention also from the point of view of their bearing on international politics. As will be explained in Chapter IV., gold has become an important factor in politics. Gold movements are very often influenced by political considerations; they are frequently the cause or the effect of some political event. Certain Governments have attempted on recent occasions to use their influence upon gold movements for the purpose of supporting their foreign policy. For this reason, also, it has become necessary to follow gold movements closely, as they often provide the explanation of political developments.

In spite of this greatly increased interest in gold

transactions it is remarkable how little is known about the subject. Information as to current movements is in many cases highly inadequate, and it often becomes available only with considerable delay and remains unconfirmed. Even in financial circles comparatively little is known about the technical details of gold movements. Most material published on the subject only touches the surface, confines itself to generalities, or refers to pre-war conditions. The statistical material of past gold movements has been neglected and is incomplete. It is desirable that more information should be available, and also that the man in the street should possess sufficient knowledge to enable him to appreciate the information obtained.

CHAPTER II

COMMERCIAL TRANSACTIONS

WHEN dealing with the motives of international gold movements, it is necessary to discriminate between direct and fundamental motives. Direct motives are, for example, the arbitrageur's endeavour to benefit by the deviation of exchanges from their gold points, or the desire of central banks to increase their gold reserves. Fundamental motives, which can only work through the intermediary of direct motives, include, among others, a too high or a too low price level, credit expansion, etc. We propose to confine ourselves here to direct motives, while indirect motives are dealt with in Chapter V.

The direct motives of international gold shipments may be divided into three groups, *viz.* administrative, commercial, and special. The first group is responsible for the shipment of gold from the principal reserves of central banks to their external reserves, the repatriation of gold held in external reserves or on deposit, the shipments of gold for minting purposes, etc. This class of gold movements is merely a physical displacement of gold, which does not affect the reserves of the banks concerned, or the gold market, or any of the markets which are affected by other kinds of gold movements. From the point of view of the markets, such operations are of no more importance than mere

transfers of gold stocks from one vault of the same bank to another. For this reason there is no need to enlarge upon this class of gold movements. For our present purpose, gold movements must involve a change in the ownership of the metal, as between different countries. It is a matter of indifference whether this change entails an immediate or subsequent physical displacement of the gold from one country to another. From the point of view of its effect upon the market, it makes little difference whether the gold is actually taken away by the purchaser or whether it is left on deposit in the country in which it was bought.

Gold movements, in the narrower sense indicated above, can be divided, according to their motives, into two main categories: commercial and special transactions. There is no rigid line of demarkation between the two. Sometimes a transaction which appears to have been brought about by commercial motives is in reality non-commercial, and vice versa. Though the division is far from ideal, it is, nevertheless, preferable to the popular division into special transactions and exchange or arbitrage transactions, two terms which are usually used indiscriminately. The shipment of South African gold to London, for instance, could not be called either an exchange transaction or a special transaction, but it is classed, without hesitation, among the commercial transactions.

According to a popular belief, the criterion of the commercial or non-commercial nature of a transaction is whether it is undertaken by a monetary authority—a Government or a central bank—or by a firm or individual. Although the adoption of this criterion would greatly simplify the classification of the shipments into either category, it is, nevertheless, unaccept-

able. Its basis is the assumption that a firm or individual transfers gold exclusively for the sake of the direct profit yielded by the transaction, and that a Government or central bank transfers gold exclusively for special purposes, always disregarding profit considerations. Neither of these two assumptions is correct. Gold is occasionally shipped by private interests, even if the transaction does not result in any direct profit. There may be ulterior motives which render it desirable to ship gold without any profit, or even at a slight loss. For instance, gold shipped without a profit or at a loss for the sake of publicity, or for the sake of its effect upon the markets (about which more will be said in a later chapter), cannot be regarded as a commercial transaction, even though the shipment is made by firms or individuals. On the other hand, shipments by authorities often arise from commercial motives. In fact, certain central banks, desirous to secure for themselves all the profits arising from gold shipments, discourage private arbitrageurs, or at least compete with them, and themselves arrange the shipment, whenever the exchange situation makes it profitable. Central banks are at an advantage in this competition, as they need not consider any loss of interest. The Reichsbank leaves the import of gold to private shippers, but takes the initiative for the export. Occasionally the authorities of countries which are not on a gold basis and where private arbitrage is therefore impossible, make gold shipments to correct the exchanges whenever these move beyond the theoretical gold points. These transactions are evidently of a commercial nature, even though they are undertaken by a monetary authority instead of private interests.

Another criterion which might be adopted is whether

or not the shipment has actually resulted in a profit. It is difficult, however, for anyone, apart from those directly concerned, to ascertain this. The margin is usually very narrow, and the expenses are by no means inelastic. The firm engaged in the shipment may have discovered a cheap route unknown to everybody else, so that a shipment which may appear unprofitable to outsiders may in reality be profitable. But it is, in reality, not so much actual results as the motives of the shipments that matter. As the margin of profits is very narrow, miscalculation or unforeseen events may easily convert an anticipated gain into a loss. This, however, does not alter the commercial character of the transaction if undertaken for the sake of profit.

Thus commercial transactions may be defined as gold shipments undertaken mainly out of considerations of direct financial profit, while special transactions are shipments which are undertaken for special motives without any expectation of earning any direct profit on the shipment. The classification of shipments into one of these two categories is often by no means easy. If it is difficult for outsiders to ascertain whether or not the shipment has actually yielded any profit, it is even more difficult to ascertain whether or not it was undertaken mainly with a view to earning direct profit on the transaction. Holland is the only country where it is possible to ascertain whether the shipment is made for the sake of profit; the Netherlands Bank insists that exporters of gold should state the destination of the consignment and should prove that the shipment is profitable, by means of disclosing the details of their calculation of the cost of the shipment.

Commercial transactions include the following categories of shipments:

(1) *Shipments from Producing Countries to their Natural Markets.*—Natural markets are not necessarily the centres where producers can obtain the highest possible price. Often factors other than price considerations, such as convenience, tradition, the regularity of means of transport, have a certain influence in determining the natural markets of gold produced in a particular country. The greater part of the South African gold output is marketed in London, often even if shipments to other centres would secure, in theory, a slightly higher profit to producers. This is largely due to London's traditional position as the world's principal gold market. The regularity with which its supply is replenished has attracted a regular demand which, in turn, has made it convenient to the South African and other producers to maintain a regular supply, even if the exchange situation would render it, in theory, more profitable to ship the gold elsewhere. If, however, the difference widens, gold is diverted from London to other markets. The tendency in this respect points decidedly towards the increase of direct shipments, *i.e.* shipments made direct to foreign countries without the intermediary of London. While before the war such shipments were exceptional, since the war they have become more frequent. In order to save double freight the greater part of the Indian demand is met by direct shipments from Durban. The firmness of the Argentine peso and other South American exchanges in 1927, coupled with exceptionally cheap freight rates quoted by Japanese steamship lines, resulted in considerable direct shipments from South Africa to South America. No gold has yet been shipped, however, from the Cape to New York or any European centre other than London

merely as a result of exchange movements. Whenever gold was taken elsewhere than London there was always a motive other than the exchange rate. Thus shipments to Buenos Aires were made mostly in payment for South African grain imports from the Argentine. Gold taken for Brazil constituted mostly special transactions. The proceeds of Brazilian loans abroad had to be transferred in the shape of actual gold, independently of any considerations of profit or exchange.

In some countries, such as, for instance, West Africa, the output is too small to make its shipment elsewhere than to London a paying proposition. The same factor is probably responsible, in part, for the arrangement whereby the gold output of the Belgian Congo is to be sold to the National Bank of Belgium instead of to the highest bidder in London. The shipment of some of the newly produced Russian gold to London, when it would have been more profitable to sell it in Berlin, probably served the purpose of publicity. In some cases the conventional market for the gold output is the producing country itself, and producers do not export it even though they could obtain a slightly better price abroad.

(2) *Shipments from the Markets to the Consumers.*—This category includes the shipment of gold for industrial and commercial purposes. The exchange rate plays a certain restricted part in the purchase of gold bought for industrial consumption, but the shipment of South African gold from London to the Swiss watch-making industry could hardly be classed among exchange transactions. Exchange rate considerations play a subordinate part also in the shipment of coins for commercial purposes to countries where they are

subject to semi-barter, or where they can be sold at a premium. Thus the demand for sovereigns by Mahomedan countries whose population requires them for their pilgrimages to Mecca is not due to any exchange consideration. In those countries sovereigns are treated as merchandise, and not as a foreign currency or a quantity of gold. The situation is similar regarding the demand for ducats for shipment to North-eastern Africa. The demand for coins for ornament in primitive countries is also independent, to some extent, of the exchange factor. All these shipments are commercial transactions, without being arbitrage or exchange transactions.

(3) *Shipments through Exchange Transactions.*—Every exchange transaction is a commercial transaction, but many commercial transactions—those included under (1) and (2)—are not exchange transactions. The terms exchange transaction and arbitrage transaction are usually used indiscriminately, though there is a considerable difference between them. The object of the exchange transaction is to substitute the shipment of gold for the transfer of funds through the intermediary of the Foreign Exchange Market. The object of the pure arbitrage transaction is the shipment of gold, without any intention of transferring funds, to take advantage of the discrepancy between exchanges and their gold points.

Claims arising from foreign trade are settled by means of exchange transactions. It would be a mistake to imagine, however, that it is importers and exporters themselves who take the initiative in the shipment when they find that it is cheaper to buy gold than to buy foreign exchange. In the vast majority of cases, it is not merchants but banks and bullion brokers who

arrange gold shipments. Exceptionally large firms, such as, for instance, Argentine grain exporters, may occasionally carry out exchange transactions. Most importers and exporters, however, carry on their business without ever making any transfer of funds by means of gold shipments, which require a highly specialised knowledge and experience. Merchants simply instruct their banks to make the transfer, and it is the latter, on their own initiative and mostly on their own account, who make transfers by means of exchange transactions, when that alternative is preferable to the purchase of foreign currencies. Occasionally, exchange transactions are made even if the exchange does not move beyond its gold points and when, in theory, it is more profitable to buy exchange. Whenever the exchange is in the close vicinity of its gold export point, and a larger transaction is expected to force it beyond that point, it is preferable to ship gold at a slight apparent loss, for the operation through the Foreign Exchange Market would prove to be more expensive. It would not be profitable on such occasions to make arbitrage transactions proper, *i.e.* to ship gold without any necessity of transferring funds. This is one of the reasons why gold may begin to move through exchange transactions before it begins to move through arbitrage transactions. In the case of an exchange which has a bad market the difference between the gold point for exchange transactions and for arbitrage transactions tends to be rather wide, as the transfer of funds through the Foreign Exchange Market tends to affect the exchange to a greater extent. It will be seen in a later chapter that the need to cover gold operations by means of forward exchange transactions, which exists for arbitrage shipments,

but does not exist for exchange shipments, is an additional factor in favour of the latter.

Exchange transactions take place, apart from the payments made in connection with foreign trade operations, in connection with international capital movements, whether temporary or permanent. Thus when a bank is desirous to transfer funds to another centre in order to take advantage of the higher rates of interest, or of the prospects of an appreciation of the exchange, the transfer may be made through exchange transactions. If a bank wishes to repay a foreign credit which it did not cover by means of a forward exchange transaction, the settlement may be made through an exchange transaction. Similarly, the transfer of the proceeds of a foreign loan, or the repayment of foreign loans falling due, or the purchase or sale of securities abroad, may give rise to exchange transactions. In all these cases gold can be shipped without any need for covering the transactions in the forward exchange market, and even at a rate slightly within the gold points.

(4) *Shipment of Gold through Arbitrage Transactions proper.*—The sole object of these transactions is to take advantage of temporary deviations of exchanges from their gold points. These operations do not result from the necessity of making any payment or the intention to transfer funds abroad. In most cases, the speculative risk of exchange movements is eliminated by means of a forward exchange transaction. This, however, does not mean that arbitrage transactions do not contain any speculative element. If the exchange moves only slightly beyond its theoretical gold point there is always the risk that some unforeseen expense or delay may convert the anticipated profit into a loss. Occasionally the speculative element

is accentuated by cutting the calculation too fine, especially as to the time of transport. In arbitrage the speculative element plays, however, a subordinate part.

Although it is contrary to the principles of prudent banking to keep open positions in foreign exchanges, in practice shippers of gold do not always cover the exchange risk. Sometimes they combine gold arbitrage with exchange speculation. As the cost of the forward exchange transaction is thus avoided, arbitrage shipments can be undertaken, in such circumstances, on the basis of almost the same exchange rate at which it becomes profitable to make shipments through exchange transactions. The difference between such speculative arbitrage transactions and exchange transactions is that in the latter case no exchange risk is involved. Occasionally, importers of gold avoid both exchange risk and the cost of forward exchange operation, through financing the shipment in the importing centre. This method cannot always be applied, as rates of interest in the importing centre are often higher than in the exporting centre.

Since the war, in the majority of cases the initiative for arbitrage transactions has been taken largely by arbitrageurs of the importing country. This is so because, though the gold market may be free, most domestic firms are reluctant to avail themselves of this freedom for fear of incurring the displeasure of the authorities and the condemnation of the Press and public opinion. Occasionally, pressure of the authorities exercised unofficially to prevent the efflux of gold renders the freedom of the gold market completely illusory. In other cases the export of gold through arbitrage is confined to foreign institutions which are in a position to disregard official disapproval of the transactions.

CHAPTER III

SPECIAL TRANSACTIONS

THOUGH no figures comparing the amounts of commercial and non-commercial transactions before and after the war are available, there is no doubt that the ratio between them has changed considerably in favour of the latter. During the war, of course, transactions were almost exclusively non-commercial, while even after the war it was not until the return of this country to the gold standard that commercial transactions began to assume substantial proportions. Even after the return of a great number of countries to the gold standard, special transactions continued to occupy a prominent place, though during the last few years their proportion to total gold shipments tended to decline.

Before the war, if a central bank wished to acquire gold it manipulated the Bank Rate in such a way as to attract gold by means of exchange and arbitrage transactions. If it was particularly anxious to increase its gold reserve it encouraged the influx of gold by artificial means, such as the fixing of a premium over and above the legal buying price, or the granting of loans free of interest, or the accepting of gold delivered at branches more conveniently situated than the head office. All these measures did not change the commercial nature of the shipments. It is only on rare occasions

that a central bank resorted to direct purchase of gold abroad irrespective of exchange considerations. Since the war, most central banks have endeavoured to replenish their gold reserves. Until recently, many of them were not on a gold basis, and could not therefore expect to acquire gold by commercial transactions. Even for those which were on a gold basis, the acquisition of gold by means of exchange transactions, supplemented by pre-war methods of stimulating a gold influx, appeared to be too slow a process. Moreover, in some cases the gold reserves were well in excess of the legal minimum, and to raise the Bank Rate to an abnormally high figure in order to attract gold would have provoked the protests of the business interests affected. Rather than expose themselves to criticism, central banks were prepared to pay a higher price and acquire the gold through direct purchases, either in the open market in London, or from another central bank. Exchange considerations were not altogether disregarded; the purchases were made in the centre where gold could be obtained at the lowest possible price. In most cases these transactions involved, nevertheless, a loss to the buyer.

It would be a mistake to imagine that special transactions are aimed exclusively at the increase of gold reserves. A large number of special transactions have been carried out with the opposite object in view. In 1925 the Netherlands Bank was desirous to convert part of its surplus gold-holding into earning assets, and to that end it paid in large amounts of sovereigns to the Bank of England, though there was no particular need to support the guilder, which was well within its gold points. From time to time the Soviet Government has exported large amounts of gold, mainly to

this country or to Germany, to meet the deficit of the Soviet Union's foreign trade. On several occasions the Danish National Bank has exported gold in order to increase its foreign exchange reserve. The Bank of Spain exported gold on various occasions in order to support the peseta. The Reichsbank, while it was under no obligation to sell gold, sold some of its reserve held abroad on occasions when the reichsmark depreciated beyond gold export point. Comparatively little is heard about these transactions—apart from the Russian gold exports, which received ample publicity on account of a legal action undertaken by the Bank of France—because the influx of gold is almost always welcome and meets with no criticism. On the other hand, the purchase of gold by means of special transactions is often subject to adverse comments, and attracts, therefore, much attention.

Although the principal motive for buying gold through special transactions is the replenishment of the stock to the legal minimum or the extension of the basis of credit, or the increase of the safety margin over the legal minimum, there are sometimes secondary motives. The declared object of the French gold purchases in 1927 from the Bank of England and from the open market, as well as from New York, was to create monetary stringency abroad, especially in London, in order to discourage the transfer of funds to France and thus to check bull speculation in francs. It was believed, however, in some quarters that motives of prestige also influenced the French gold policy. Since, from 1914 until 1927, France's financial influence was paralysed owing to the depreciation and fluctuation of the franc, it was difficult for her financial leaders to resist the temptation to take the first opportunity of

re-asserting the importance of France in the sphere of international finance. Political motives also exert an occasional influence on gold movements through special transactions.

Several attempts have been made to regulate the demand of central banks for gold. The first steps in this direction were the resolutions of the Brussels and Genoa conferences against an excessive international demand for gold, on the ground that it would tend to endanger the stability of the international level of prices. One of the principal objects of the movement towards co-operation among central banks has been the application in practice of these resolutions. Until 1927 this object was more or less attained. Most countries which stabilised their exchanges and restored the gold standard owed the success of their monetary reconstruction to the support received from the Bank of England and the Federal Reserve Bank of New York. They were willing, therefore, to submit their gold policy to the approval of these institutions. It was agreed that their requirements would be met gradually out of the fresh supply of South African gold, and from the surplus gold of the Federal Reserve system. The Bank of England has taken charge of the purchases in the open market in London on behalf of the continental central banks, so as to avoid the clash of their demand.

These arrangements worked satisfactorily until the spring of 1927, when the Bank of France appeared on the scene as a large purchaser of gold. As France carried out the stabilisation of her currency without any external aid, she felt entitled to pursue an independent gold policy. The French gold purchases in London, which were made in defiance of the protests

of the Bank of England, brought about a violent campaign in the British financial Press. As the attitude of the Bank of France was known to have been inspired by M. Poincaré, the French intervention in the London gold market was described as a "financial Ruhr adventure". Largely as a result of these criticisms, but also prompted by the desire to participate in the movement of co-operation between central banks, the Bank of France eventually agreed to comply with the fundamental principle of co-operation. At a conference of the leading central banks held in Washington in July 1927, an agreement was reached as to the principle of non-interference of central banks with each other's gold reserves. According to this principle, no central bank is to withdraw any gold from another central bank without the latter's consent. The same rule also applies to the gold available in the open market in London, which is rationed out among the claimants in agreement with the Bank of England.

In theory the understanding is perfect. In practice, however, there is a very important flaw which considerably reduces the beneficial effect of the co-operation of central banks. The agreement only binds the central banks not to make direct purchases from other central banks. It does not restrict indirect purchases made under the guise of commercial transactions. This question was first raised in connection with shipments of gold for Germany towards the end of 1928. Technically, these shipments were normal arbitrage transactions, undertaken for the sake of profit arising in consequence of the appreciation of the reichsmark beyond its gold point. The Reichsbank was anxious to emphasise its neutrality towards the movement, but it was none the less obvious that the influx was officially encouraged.

Gold delivery was accepted in centres other than Berlin, such as Cologne, Bremen, and Hamburg, though the Reichsbank was under no legal obligation to do so. The Reichsbank was, moreover, responsible for the exchange movement causing an influx. Owing to excessive borrowing abroad, the reichsmark displayed an exceptionally firm tendency. Instead of counteracting this unnatural trend, the Reichsbank further accentuated it, not only by maintaining the Bank Rate at a high figure, but also by means of selling part of its foreign exchange reserve. It was noticed that large gold purchases on German account left the Foreign Exchange Market unaffected, probably because the Reichsbank supplied the currency required for the transactions.

In answer to British Press criticisms, inspired statements in the German Press pointed out that the Bank of England did not disapprove of the transactions. This was in accordance with facts. The Bank of England regarded the gold efflux to Germany as an alternative to an efflux to New York, which was considered the greater of the two evils. No attempt was made, for this reason, to prevent the efflux to Germany by any special agreement with the Reichsbank.

On several occasions between 1928 and 1931, French gold imports were criticised on the ground that they were special transactions in disguise. As technically they were commercial transactions, no steps were taken to arrive at any understanding to check them. It has been suggested in the British Press that the principle of non-interference should be extended to cover indirect purchases. The solution is not so simple as for direct purchases. Most devices applied by the authorities to encourage gold imports were in use already before the war, and were regarded as

part of the normal activities of central banks. This, however, is hardly an argument in favour of tolerating the system under the changed conditions. Before the war there was no shortage of gold, so that there was no particular objection to any artificial encouragement of international gold movements. At present, however, these artificial means of stimulating commercial transactions are as harmful as direct special purchases themselves. Technically, there is a difference between them as to the form in which they take place, but there is no difference as to their effect.

Even if we agree as to the necessity of applying the principle of non-interference to disguised special transactions, it is by no means easy to define them. It is difficult to say when the attitude of a central bank aims merely at the fulfilment of its normal function and when it is a disguised manoeuvre to circumvent the principle of non-interference. The difference between defending one's own gold reserve and attacking someone else's is merely one of degree. The policy of a central bank is influenced by a number of considerations, and it is difficult to single out any one of them as being responsible for any particular action. For instance, the reply of the Reichsbank to criticisms that it has maintained a high Bank Rate in order to attract gold might well be that it had to maintain a high rate so as to prevent the repetition of the speculative boom which culminated in the Black Friday of May 13, 1927. It would be possible, none the less, to regulate by agreement transactions which are obviously indirect purchases.

Most special transactions in the open market are carried out by the Bank of England on behalf of the foreign central banks. The gold is usually announced

to have been taken for an "undisclosed destination". The secrecy that surrounds these transactions attracts much attention, and the "Unknown Buyer" has become a popular figure in the headlines of the Press. In most cases there is no genuine reason for secrecy, as the foreign buyers themselves announce the purchase at the first opportunity.

An unusual example of special transactions was provided by the gold exports of Brazil. Many Brazilian loan agreements concluded after 1926—whether by the Federal Government, State Governments, or Municipal authorities—contained a clause according to which the issuing houses have to transfer to Brazil the proceeds of the loans in the shape of actual gold. When the loans were issued in the United States, gold was taken from New York. When they were issued in London gold was usually shipped from South Africa.

Contrary to popular belief, special transactions are occasionally undertaken, not only by authorities but also by private firms. Gold shipments have considerable publicity value in given circumstances, for the sake of which it is worth while to lose a few thousand pounds in the shipment. For example, the first shipment from New York to London since the war was undertaken at the end of 1927 at a nominal loss for the sake of the publicity attached to the transaction. When in the autumn of 1928 the first gold shipment was made from London to New York, indicating a turn of the trend, it was undertaken at a loss, despite general disapproval on both sides of the Atlantic, by a new firm of brokers in New York which hoped to gain prominence by such means. This factor is, however, losing its importance, as the novelty of gold movements wears away.

Another inducement of far greater importance for undertaking gold shipments at a loss is the anticipation of its effect upon the markets. As will be explained in detail in Chapter VIII., gold shipments tend to have an effect upon the Money Market, Foreign Exchange Market, Gilt-edged Market, and, in certain circumstances, upon the general tendency of the Stock Exchange. Those who arrange the shipments are in a position to discount its effect upon the markets, so that they are likely to be more than compensated for their losses on the shipment. This "bluff" cannot, however, be repeated too often. If the market realises that the shipments are not genuine, their effect is likely to become insignificant.

From the point of view of monetary stability the great disadvantage of special transactions is that they cannot be foreseen. Commercial transactions are foreshadowed by the movement of the exchanges, which are usually gradual, and give timely warning to the market to anticipate the gold movements. Their effect on money rates is, therefore, produced gradually. Special transactions, on the other hand, usually take place without any preliminary warning, and reach Money Market and Stock Exchange as a bolt from the blue. Their effect tends to be, therefore, much more pronounced and unsettling than that of a commercial transaction of the same amount. Moreover, commercial transactions have their natural limits, as they tend to provoke a reaction in the exchange. Special transactions, on the other hand, may be carried on indefinitely irrespective of their effect on the exchange. For this reason they are likely to create a stronger current of pessimism and more uncertainty than commercial transactions.

CHAPTER IV

POLITICAL GOLD MOVEMENTS

WE have seen in the preceding chapters that gold movements, whether commercial or special transactions, may be undertaken either as a result of financial considerations, or for the sake of political considerations. There is reason to believe that, during the last few years, gold movements have been influenced on many occasions by the desire of a Government to bring pressure to bear on another Government. The introduction of gold movements as a weapon in the armoury of statesmen in international politics has the appearance of an innovation. It is certainly new in the sphere of gold arbitrage, but not in the sphere of politics. It is interesting to recall that, some centuries ago, international gold movements of a certain kind, undertaken for political motives, had a considerable share in shaping history. On various occasions, gold found its way from one country to another, from the treasuries of allied or hostile Governments into the purses of those capable of influencing the foreign policy of their countries. But for the influence of such "special" transactions, the outcome of some of the wars of the eighteenth century would probably have been different, and history would possibly have taken a substantially different course.

In our days, gold seems to have gained once more

prominence in international politics, but in an altogether different way. Changed conditions necessitate changed methods, though the new and more sophisticated devices may be inspired by the same Machiavellian spirit as the primitive means of days gone by. The shipment of gold no longer serves the purpose of bribing influential personalities to betray their countries, at least not in countries of western civilisation. It is now used as a means for influencing the monetary situation in certain countries, so as to induce their Government to change their foreign policy. Owing to their comparatively narrow margin of gold reserves, it is possible to cause them considerable inconvenience by bringing about a withdrawal of gold, either through direct purchases by the authorities, or through pursuing a monetary policy tending to encourage imports through arbitrage.

It is usually extremely difficult to ascertain whether or not gold movements are the result of political motives. Even when the authorities of the aggressor country take the initiative themselves to bring about gold shipments, it is always possible to put forward arguments in defence of their transactions on the ground that they are prompted by financial motives. When the gold shipments are carried out by private arbitrage, then the existence of political motives is even more difficult to prove. The most convenient defence is that the gold movements are due to natural tendencies against which the authorities of the importing country are powerless. There are so many currents and cross-currents in the foreign exchange market that it is impossible to ascertain the responsibility of any particular quarter for the depreciation of an exchange. Thus, it is practically

impossible ever to substantiate the charges that certain authorities have influenced the exchange situation in such a way as to bring about gold movements that suited their political purpose. Very often it is sufficient if the authorities refrain from counteracting certain tendencies in order to give rise to a gold movement which serves political ends. If it is difficult to prove active interference, the facts and motives of a passive attitude are even more elusive.

Although there have never been any concrete proofs available in support of the theory that certain gold movements were prompted by the result of political considerations, in some cases circumstantial evidence was decidedly in favour of the theory. This was the case of French gold imports on various occasions during 1929 to 1931. We have seen in the previous chapter that, in 1927, the Bank of France purchased large amounts of gold both from the Bank of England and in the open market. Although in this case the initiative was taken by the authorities themselves, these transactions had no political motives. On the other hand, there is reason to believe that the gold movements during 1929 to 1931, though they were apparently normal commercial transactions, were largely due to political considerations. Whenever relations between France and Great Britain became strained, the franc moved invariably against sterling, and large amounts of gold were shipped through arbitrage to Paris. This was the case when Mr. Snowden, soon after he assumed the office of Chancellor of the Exchequer, declared his intention of pressing the claim of British holders of French *rentes* for compensation. Again when, in August 1929, Mr. Snowden took up a firm attitude against those clauses of the original

Young Plan which favoured France to the detriment of British interests, the result was a sharp movement of the franc against sterling and the withdrawal of a considerable amount of gold. Again in 1930, in the course of the negotiation of the Young Loan, when British and French interests clashed once more, the result was similar. Last but not least, the depreciation of sterling and the record outflow of gold in July 1931, had a decidedly political flavour. There were, of course, many other factors at work, but it is difficult to regard the repetition of the same phenomenon in the same circumstances over and over again as a mere coincidence. As the same effect followed regularly the same cause, the market takes it now for granted that any Anglo-French disagreement is bound to bring about an adverse movement of sterling, and largely discounts that movement.

The political factor also operates in a negative sense. In 1929, during the period between the two Hague Conferences, gold withdrawals were comparatively moderate, possibly because the French authorities were desirous of improving their relations with the British authorities. The suspension of French gold withdrawals early in 1931 was probably due to the desire of the French authorities to obtain British political support against the German demand for the revision of the Young Plan, and still more against the proposed Austro-German Customs Union.

Another example of the modern methods of using gold as means to an end in international politics has been provided by the substantial gold movements to and from Germany in recent years. From time to time during 1928, 1929, and 1930, large quantities

of gold were imported to Germany, mainly from London, owing to the encouraging attitude of the Reichsbank. When Germany was importing gold on a large scale, it was obvious that she would be unable to keep the amount acquired for any length of time. If, in spite of this, the imports were encouraged, it was with the object of preparing for an efflux on a sufficiently large scale to impress the creditor nations at the psychological moment. The view was widely held in Germany that, should the transfer of reparations begin to threaten the stability of the reichsmark, only an efflux of gold on a large scale would draw attention to that fact. It was believed that, should the adverse conditions result in merely a decline of the foreign exchange reserve nobody would take much notice of it, while if they brought about a spectacular efflux of gold, public opinion and political circles abroad would realise Germany's plight and the necessity of granting a reduction or a moratorium of reparations. In order to be able to export a huge amount of gold, without thereby paralysing the economic life of the country, it was necessary to import a large surplus. Hence the Reichsbank's attitude encouraging the import of gold at a moment when it was obvious that the surplus would have to be re-exported shortly, as difficulties tending to provoke an efflux were likely to arise.

The psychological moment arrived first at the time of the Paris Conference of Reparations Experts early in 1929. When this conference reached a deadlock, there was a spectacular efflux of gold from Germany. The scheme worked successfully, as it was largely under the influence of the heavy export of gold that the Allied experts, anxious to avoid a financial collapse

of Germany, came to terms in Paris. Again, in June 1931, when Germany sought to obtain a revision of the Young Plan, large amounts of gold were exported at the psychological moment. The gold was accumulated in the preceding two years, by keeping interest rates unduly high and attracting an excessive amount of foreign short-term credits. It is not suggested that the efflux in 1929 or in 1931 was "staged". There was unquestionably a genuine flight from the reichsmark owing to the uncertainty of the political outlook which appeared to threaten the stability of the currency. But if the flight had brought about merely a decline of the Reichsbank's foreign exchange reserve instead of resulting in a spectacular efflux of gold, it would have attracted much less attention. As it were, the re-export of the surplus of gold accumulated in excess of the immediate requirements duly impressed the world with the gravity of the situation and was largely responsible for President Hoover's proposal of a one year's moratorium. It is reasonable to assume that, in pursuing a policy leading to the increase of the gold stock, the German authorities had such an end in mind.

There are other, less noteworthy examples of the political motives of gold shipments. In many cases the destination of the gold exports of the Soviet Government was determined, not by considerations of exchange rate, but by a desire to influence favourably the authorities or public opinion of certain countries, or to show a desire of rapprochement to certain countries calculated to arouse the jealousy of other countries. The willingness with which some continental countries submit their gold purchases to the approval of the Bank of England may also be inspired by

political motives at least to the same extent as by financial considerations.

It is to be deplored that, during the period when the highly delicate machine of the international money market is subject in any case to many abnormal influences, a further disturbing element should be introduced in the form of the political factor. The result is to increase the atmosphere of uncertainty in the foreign exchange market, for, while it is difficult enough to foresee economic and financial developments affecting exchanges, to forecast the probable turns of the political factor is bordering on the impossible. Fortunately the disturbing influence of the political factor is likely to decline through the progress towards a more equal distribution of the world's monetary gold supplies.

CHAPTER V

CAUSES OF GOLD MOVEMENTS

THE immediate motives of gold movements, whether commercial or special, are themselves effects of indirect causes which, in turn, may be the result of other sets of causes. When an arbitrageur despatches gold for the sake of a narrow margin of profit he unconsciously lends himself to act as the executive hand of fundamental tendencies. There are a great variety of forces capable of setting in motion tendencies that become ultimately responsible for gold shipments. They may be divided into two classes according to whether or not they act through their effect upon exchange rates. As has been shown in Chapters II. and III., special transactions and certain kinds of commercial transactions, such as the shipment of gold from the producer through the market to the consumer, are largely independent of exchange movements, while exchange transactions and arbitrage transactions are the result of the deviation of exchange rates from their gold points.

The motives of special transactions are usually either a desire for an increase or reduction of the amount of the gold reserve, or profit earned indirectly through the effect of gold shipments on the market. Questions of prestige, political considerations, and a great variety of other motives, also play occasionally a more or less important part in bringing about special

transactions. In most cases they do not originate from any fundamental economic tendencies, while in many cases they are carried out in defiance of economic tendencies. Being essentially the outcome of arbitrary human decision, they are not governed by any rules. The motives of shipments from producers to consumers, with or without the intermediary of a market, are self-explanatory and need no further examination.

The fundamental causes affecting gold shipments through their influence on the exchange deserve particular attention. These causes are of very great importance, not only from the point of view of the monetary system, but also from that of the economic system as a whole. It is these movements which tend to secure an automatic character to the working of the gold standard system. They tend to readjust not only internal and international monetary discrepancies, but also abnormal economic currents which threaten the equilibrium of economic life. As these movements are due to an appreciation or depreciation of the exchanges beyond their gold points, they may be brought about by any cause affecting exchanges to a sufficient extent. It is not within the scope of the present book to examine in detail the causes of exchange fluctuations. We propose, however, to indicate below the main causes which, through their influence on the exchange rates, tend to result in gold movements.

(1) A rise or fall of the price level, independently of the tendencies of the world price level.

(2) Deficit or surplus in the trade balance.

(3) Superabundance or scarcity of means of payment.

(4) International movements of funds.

(5) Psychological causes.

Rising prices tend to bring about a depreciation of the exchange, which again tends to result in an efflux of gold. As the volume of the means of payment is thereby diminished, the gold efflux thus caused tends to check the rising trend of prices. Similarly, a falling trend is readjusted by an influx of gold brought about by the appreciation of the exchange. Gold movements also tend to eliminate discrepancies between price levels in various countries, as gold flows from the country with the higher price level to the country with the lower price level, causing a contraction of means of payment in the former and an expansion of means of payment in the latter. About the effect on gold movements of the discrepancy between price levels more will be said in Chapter VI.

Gold movements caused by exchange movements also tend to balance any surplus or deficit in the foreign trade of a country. This aspect of their function was generally misunderstood or at least exaggerated before the war. It is a commonplace of pre-war text-books on economics that gold is imported or exported in order to balance the discrepancy between the debit and credit side of the trade balance. This theory, in its primitive and superficial form, has been contradicted by facts innumerable times. The mere existence of a trade deficit does not in itself necessitate an efflux of gold. It is only if the increase of the external indebtedness caused by the trade deficit takes place in circumstances which result in a depreciation of the exchange that the trade deficit tends to provoke an efflux of gold. The only cases in which a trade deficit must necessarily be met by gold exports are those of

countries whose external credit is very bad. If the imports of Soviet Russia exceed its exports, it has to cover a great part of the deficit by the sale of gold abroad, because it is unable to raise external credits. Apart from such exceptional cases, a trade deficit may or may not cause a gold efflux, according to whether it affects the exchange.

An improved and more sophisticated version of the pre-war theory states that gold movements serve the purpose of compensating the difference between the debit and credit side of the balance of payments, including both current items (import and export of goods and services) and capital items (changes in the balance of indebtedness). This, however, is a mere truism which does not in itself provide any explanation as to the motives of gold shipments. At any given moment the balance of payments is bound to be at equilibrium, for an excess of imports of goods and services is automatically and immediately offset by a corresponding increase of the balance of external indebtedness without any gold shipments. Moreover, a gold export may occasionally be the cause and not the effect of the changes in the balance of indebtedness. It is only if and when these changes result in exchange movements beyond the gold points that they tend to bring about gold shipments.

Although discrepancies in the trade balance or changes in the balance of indebtedness are not necessarily offset by gold movements, in practice they often affect exchanges sufficiently to cause an efflux or an influx. It is the floating indebtedness which tends to affect the exchange rates and which, therefore, may become responsible for a gold efflux. The seasonal movements of foreign trade, unless offset by other

factors, result in seasonal exchange movements, which again are responsible for seasonal gold movements. In the long run, the gold stock of a country whose imports of goods and services constantly exceeds its exports of goods and services is likely to decline rather than increase, owing to the difficulties of balancing the deficit by means of long-term borrowing.

A gold efflux caused by the influence of a trade deficit on the exchanges tends to readjust the equilibrium of the exporting country, through its effect on the supply of means of payment. A reduction of the volume of currency and credit and an increase of the rates of interest through an efflux of gold tends to cause a decline in prices, while the price level of gold-importing countries tends to rise. As a result, the competitive capacity of the gold-exporting country, both in the home markets and in the foreign markets, tends to improve.

An excessive or inadequate supply of means of payment may cause gold shipments either through its effect on prices or through its effect on rates of interest. We have seen already that, if gold movements are caused by the factor of price level they tend to readjust the discrepancy between prices at home and abroad. The same automatic readjusting effect is produced if a change in the supply of means of payment brings about a gold movement through its influence on interest rates. An efflux of gold caused by the effect of low interest rates on exchange rates tends to eliminate the surplus currency and credit, while an influx caused by high interest rates tends to increase the supply of means of payment.

Over-lending and over-borrowing abroad tend to affect the exchanges and are therefore often responsible

for gold movements. They also carry their own corrective, for an efflux of gold from the lending to the borrowing country tends to raise the rate of interest in the former and tends to reduce it in the latter. The effect of capital transfers upon gold movements is dealt with in detail in Chapter VII.

Gold shipments caused by exchange movements due to psychological or speculative factors tend to counteract those factors, as gold points provide a natural limit to their influence. If adverse psychological influences are so strong as to threaten the stability of the currency, then, of course, the efflux of gold tends to accentuate rather than attenuate the panic. So long, however, as there is reasonable hope that the monetary authorities are able to maintain the gold standard, the efflux of gold tends to strengthen confidence in exchange.

CHAPTER VI

PRICE LEVELS AND GOLD MOVEMENTS

WE have seen in Chapter V. that a rise or fall of the price level of a given country, independently of the tendencies of the world price level, tends to result in gold movements through its effect upon exchange rates. This theory is of comparatively recent origin. Throughout the nineteenth century, the theory according to which a trade deficit tends to bring about a corresponding gold efflux, was considered as an adequate explanation of gold movements. To a great extent it was, in fact, adequate in the comparatively stable conditions prevailing before the war. Since the war, however, it has been realised that changes in the trade balance are themselves often the effect of deeper-lying causes, and that, in order to provide a satisfactory explanation of gold movements, it is necessary to study these fundamental causes. It has been recognised that the balance of trade is largely influenced by the difference between the price levels of various countries, and that, consequently, any change in the relation between their price levels tends to result in corresponding gold movements. The reason why this was not duly realised before the war was that price levels in most countries were, generally speaking, in a state of equilibrium, and changes in prices in particular countries in relation to the world level were not

sufficiently pronounced to produce an obvious effect upon trade balance, exchanges, and gold movements.

After the war, however, during the period of fluctuating inconvertible currencies, the prominence of the movements of price levels upon trade balances and exchanges has become obvious; though it could not influence gold movements until the restoration of the gold standard. According to one school of thought, the difference between price levels in various countries cannot influence gold movements otherwise than through its effect on trade balance. According to another school of thought, it can result in gold movements through its direct effect on exchanges which are bound to represent the ratio between the price levels of the countries concerned.

The practical significance of the difference between the two theories is negligible. Whether a discrepancy between the internal prices of a country from the world level affects exchanges directly or through its effect upon the trade balance, its influence upon gold movements is incontestable. The experience of the last few years provided some very interesting examples to prove it. While before the war, any discrepancy which may have developed between the price levels of various countries on a gold basis was usually gradual and moderate, the circumstances in which certain currencies were stabilised after the war resulted in very pronounced differences between the price levels of countries which have adopted the gold standard. These differences had a considerable effect upon international gold movements during the last few years.

It is reasonable to assume that no country which restored the gold standard after the war stabilised its

currency at a level corresponding exactly, or even approximately, to the internal purchasing power of its currency. Several countries, such as Great Britain and Italy, stabilised their currencies above their internal value; in order to bring about a readjustment, internal prices had to decline. Other countries, such as France, Germany, and Belgium, stabilised their currencies below their internal value; the process of readjustment implied, in these cases, a rise of internal prices. The readjustment was, in every case, a slow process. It took years before wholesale prices had adjusted themselves to the new levels of the exchanges; while retail prices, the cost of living, and wages are still far from having reached the pre-war state of international equilibrium. Those countries which stabilised their exchange at a too high level suffered the disadvantage of high prices, wages, and cost of living in international competition. As a result, their export trade was handicapped, and their foreign rivals were able to undersell them even in the home market. On the other hand, countries which stabilised their exchanges at a too low level enjoyed the advantage of comparatively low prices, cost of living, and cost of production. Their export trade received thus a stimulus, and the comparatively cheap cost of living attracted a great number of foreign visitors. Thus, the circumstances in which various countries stabilised their currencies had a considerable effect upon their trade balances.

It was this factor which was, to a great extent, responsible for the weak undertone of sterling which, in turn, resulted in an outflow of gold from Great Britain during the past years. It was owing to this factor that Italy has not been able, so far, to accumu-

late a large gold reserve. The fact that, in spite of her comparatively high price level, Italy did not lose gold is attributable to the high interest rates prevailing in that country and to the fact that her emigrants' remittances, which constitute a most important item in her trade balance, are independent of the influences of relative price levels. The same factor was, to some extent, responsible for the comparative facility with which the German gold reserve was replenished after the stabilisation of the reichsmark; though, admittedly, the extensive external borrowing of Germany played a more important part in this respect. The stabilisation of the franc at a too low level was one of the principal causes of the heavy influx of gold to France and to Belgium.

In theory, the effect of such discrepancies between national price levels upon gold movements is bound to be essentially temporary, for the gold movements tend to bring about a readjustment of price levels. If a country whose prices are relatively high loses gold, the contraction of currency and credit thus caused tends to bring about a fall of its price level. If a country whose price level is lower than that of other countries receives gold from abroad as a result of this discrepancy, the expansion of currency and credit caused by the influx tends to raise the internal prices to the world level. In practice, however, the process of readjustment is very slow, and it can, moreover, be delayed by the monetary policy of the authorities of the country concerned. The system of gold standard has lost much of its automatic character since the war, and, especially during the last few years, the authorities in almost every country have adopted a much more liberal interpretation of its

principles. An efflux of gold need no longer bring about a corresponding contraction of the volume of currency and credit. If such a contraction is contrary to the wishes of the monetary authorities, they can prevent it by allowing their reserve ratio to decline, and the diminished volume of gold can thus serve as a basis for an unchanged volume of currency and credit. If the authorities of a country, which receives gold from abroad as a result of its comparatively low price level, wish to prevent the influx from bringing about an expansion of currency and credit and a rise in the price level, they can do so by sterilising the whole or part of the gold received. This is what has taken place in France during the last few years. Owing to the immobilisation of large amounts by the French Treasury and the Caisse d'Amortissement, the heavy gold influx was prevented from producing its natural effect upon the French price level. Another factor which worked in the same direction was the hoarding habit of the French population. With the return of confidence in the stability of the franc, the public in France has resumed its old habit of hoarding notes on a large scale. For this reason, part of the expansion of the currency, brought about by the influx of gold, was sterilised. Owing to these circumstances, the discrepancy between the price level of France and the world level could exist for several years. Presumably, it would have continued to exist for some time, but for the decline of the world price level which eliminated the discrepancy.

CHAPTER VII

CAPITAL TRANSFERS AND GOLD MOVEMENTS

ONE of the most important abnormal factors of gold movements since the war has been the increase of the extent to which capital is transferred between various countries. Before the war, the international movement of capital pursued a regular course, and was largely influenced by the discount rate policy of central banks. As a result of the changed general conditions brought about by the war, a number of strong factors are now at work which are largely independent of normal bank rate influences. The following are the most important of these:

- (1) Transfers of reparations and war debts.
- (2) Changes in the international distribution of wealth.
- (3) Internationalisation of stock exchange speculation.
- (4) Increased international movements of short-term funds.
- (5) Increased discrepancy between the scale of direct taxation in various countries.

The necessity for the debtor countries to transfer large amounts to their creditor countries, on account of war debt and reparation payments, constitutes a new and important factor affecting international gold movements. To a great extent it was responsible for

the heavy French purchases of gold abroad during the last few years. As France is the principal claimant of reparations, and her reparations receipts are counteracted only in part by her war debt payments to Great Britain and the United States, the difference tends to affect favourably the French exchange and tends to encourage gold movements to France. European war debt payments to the United States were probably largely responsible for the flow of gold from Europe to New York which took place in spite of the fact that the American authorities are not at all desirous of receiving any more gold from Europe. As all these international transfers of capital are determined by agreements, they are entirely independent of any of the influences which usually affect normal gold movements.

A factor of at least equal importance is the fundamental change in the international distribution of wealth brought about by the war. The United States has accumulated an enormous wealth, and her willingness or unwillingness to re-lend part of her capital constitutes a predominant factor in the international movement of funds, and has a strong influence upon international gold movements. Owing to the willingness of the American market to absorb foreign loans during the period of 1924 to 1928, the movement of gold to the United States was practically checked during that period. In fact, signs of the beginning of a process of redistribution of the gold stock of the United States became noticeable. American lending was responsible for the heavy gold influx to the South American countries during 1926-28, and was also an important factor in the reconstruction of Germany's gold reserve. The cessation of lending abroad

as a result of the Wall Street boom checked, however, the redistribution of the gold hoardings of the United States. Contrary to expectations, lending abroad was not resumed after the Wall Street boom was over, and, consequently, the gold which left the United States during the period of 1924 to 1928 returned there once more. The unwillingness of France to lend abroad was, to a great extent, responsible for the flow of gold to Paris, while the more liberal policy adopted in 1931 was certainly largely responsible for the re-export of a small part of the accumulated gold. All these movements were due to factors largely independent of the influence of bank rates.

Another of these abnormal factors, causing gold movements through bringing about capital transfers, is the progress of internationalisation of Stock Exchange speculation. Before the war, international interchange of stocks and shares was largely confined to regular arbitrage transactions in a comparatively limited number of securities which were quoted in several countries. The number of those taking an interest in international speculation was small, and their total transactions, even during periods of booms, were seldom sufficiently large to affect the international monetary situation. During the last few years, however, speculation on foreign Stock Exchanges has become very popular, not only among professional elements, but also among all classes of investors. European speculation in New York was the most characteristic but by no means isolated example of this new tendency.

Another abnormal factor affecting gold movements is the increased popularity of the international shifting of funds to take advantage of higher rates of interest

paid on short loans in foreign money markets. No individual capitalist, or even industrial or commercial enterprise, would have thought in pre-war days of transferring their balances abroad for temporary investment in short loans for the sake of a difference in interest rates. Although banks have always endeavoured to obtain a better yield on their liquid funds by shifting part of them to centres where short-term loans commanded higher rates of interest, the extent of their operations of that kind was comparatively small until after the war. The general adoption of telegraphic transfers and trunk calls in foreign exchange dealings has facilitated interest arbitrage to a very great extent, while the development of a forward exchange market has also been very helpful in that respect. Moreover, as since the war most banks have built up large foreign exchange departments whose activities have been curtailed by the decline of speculation in exchanges, the staffs of these departments, anxious to keep themselves employed and to produce a profit are eagerly watching every fractional discrepancy providing an opportunity for interest arbitrage.

As Stock Exchange booms are usually accompanied by rising money rates, the two new factors—the transfer of funds by those engaged in international speculation and those seeking to obtain a higher yield on short-term loans—usually operate simultaneously, and tend to stimulate each other. Their combined influence would make itself felt in the international money market even if conditions were otherwise entirely normal. As things are at present, the appearance of the new factor tends to produce a particularly strong effect. It was, directly or indirectly,

responsible for the abnormal gold movements which compelled Canada temporarily to suspend the gold standard in 1929; for, apart from the direct interest in Wall Street speculation, which was substantial in the case of Canada, the lure of high call money rates diverted Canadian funds to New York. It nearly brought about a collapse of the German currency, owing to the virtual suspension of German long-term borrowing abroad. For the same reason, it threatened the stability of the currencies of Poland, Austria, and a number of other countries. It also delayed the restoration of the gold standard in several countries.

The effect of the new factor on the monetary situation of Great Britain is too well known to require detailed description. The weakness of sterling and the heavy loss of gold during the first three quarters of 1929 were largely the result of British and continental speculation in Wall Street and of the transfer of funds from London to the New York call money market. It necessitated the increase of the bank rate to $6\frac{1}{2}$ per cent during a period of trade depression—a fact which requires no comment.

The example of the Wall Street boom of 1928–29 gives thus an idea of the importance of the new factors of gold movements. Whenever there is a boom in any of the foreign Stock Exchanges the same experience may repeat itself to a greater or less extent. As the habit of buying shares quoted in foreign markets has been acquired by investors, large and small, the chances are that we shall witness the reappearance of the new factor sooner or later. It seems probable that, within the next few years, while general conditions are still far from normal, we shall experience the repetition of difficulties caused by the new kind

of "gold rush" towards countries where it is the least welcome. The new factor may repeatedly disorganise the international money market, and Great Britain is likely to become again one of the chief victims of its disturbing influence.

Undoubtedly, an all-round increase of the margins of gold stocks in countries on a gold basis, and an increase of the number of free gold markets, together with a more even redistribution of gold supplies, will mitigate in the long run the effect of such shocks directed by the new factor against international monetary stability. The disturbing influence will remain nevertheless in existence, and will constitute a potential danger, or at least the source of considerable inconvenience. Its significance in the long run lies in the fact that, unlike other disturbing influences, it does not carry its own corrective. The factors of gold movements operating before the war automatically set into motion forces tending to neutralise their disturbing effect. If the amount of currency was excessive, low rates of interest and/or high prices resulted in an outflow of gold which eliminated the surplus. If commodity prices were falling in relation to the world level, the influx of gold brought about by the effect of the tendency upon the trade balance checked the fall. The working of the monetary system before the war provided a full justification of the theory of "economic harmonies" put forward by the Optimistic School of the nineteenth century. Carey and Bastiat would find it, however, most difficult to defend their thesis in the light of the new experience. The new factor of international gold movements does not set into motion any forces tending to readjust the excesses of the phenomenon responsible for setting it into

motion, *i.e.* the exaggerated Stock Exchange boom. On the contrary, it tends to accentuate the excessive rise of stock prices, and to increase the adverse effects of the inevitable slump.

The effect of the Wall Street boom and the subsequent slump on international gold movements may be quoted as a characteristic example in this respect. While the American authorities were anxious to restrict credit in order to check the boom, the inflow of gold caused by the buying of American shares and by the transfer of funds to the New York market of brokers' loans frustrated their efforts. A rise of interest rates caused by the official monetary policy accentuated the influx of foreign funds which resulted in an unwanted influx of gold. This, in turn, tended to encourage speculation through its psychological influence, even if its direct effect was neutralised by the monetary authorities. When the turn of the tide came, the withdrawal of foreign funds from New York resulted in an efflux of gold which was then as inopportune as was the influx during the boom. Although the arrangements made by the Federal Reserve authorities prevented the gold efflux from bringing about a contraction of credit, its psychological effect was decidedly responsible for the accentuation of the slump, and for the general feeling of pessimism as to trade prospects in the United States. Thus, while gold movements provoked by changes in commodity prices tend to bring about a readjustment, those provoked by the fluctuation of stock prices tend to accentuate these fluctuations.

Whereas the elimination of other disturbing factors is merely a question of time, there seems to be no prospect for the disappearance of this new factor. The

popularisation of international speculation in securities is in accordance with the fundamental tendency of internationalisation of finance, which has been making rapid headway since the war. We have acquired better knowledge of each other's conditions, and have established innumerable new channels through which capital is enabled to cross political frontiers. This tendency has undoubtedly considerable advantages, but at present we feel its inconveniences to a greater extent than its beneficial influence. It is difficult to suggest any remedy against the new disturbing factor. While it is possible to check the international flow of funds by means of embargoes on foreign issues, there are no means of preventing the investor from buying shares abroad or from transferring his balances to a money market which allows a higher interest. We are entirely helpless against this factor; all we can do is to hope that, in the course of time, London's position will strengthen sufficiently to enable her to stand the strain of its influence without undue difficulties.

The factor of international movement of funds as a result of international speculation and interest arbitrage has caused, and is likely to cause, considerable inconvenience to practically every country. There is, however, another factor affecting gold movements, whose evil effects are largely confined to Great Britain. This factor is the discrepancy between the rate of direct taxation in various countries.

In most countries direct taxation is considerably lower than in Great Britain. The discrepancy is likely to widen rather than decline during the next decade or so, as most countries are likely to make considerable reductions in their direct taxation. In fact, many of them have already carried out important reductions

during the last year or so. In this country, on the other hand, the most that taxpayers can expect is that there will be no increase in the rate of income tax, surtax, and death duties. Even in that case the difference between taxation burden in this country and abroad will widen, and the temptation for taxpayers to live abroad, or to send their capital abroad, will increase. Since the war, Great Britain has lost already many thousands of people who settled abroad in order to avoid the payment of income tax, while the number of those who sent part of their capital abroad to escape taxation is even greater. As in the case of the international movement of funds, better knowledge of conditions in foreign countries has largely contributed to this development. A further reduction of taxation abroad is likely to stimulate this tendency. As a result, there will be a constant outflow of funds which will tend to bring about a considerable efflux of gold. The importance of this factor would become greatly accentuated if direct taxation were to be increased in this country. While the influence of declining taxation burden abroad is gradual, an increase of income tax or death duties would produce an immediate strong adverse effect.

The factor of discrepancy in taxation has been operating slowly but steadily ever since the end of the war. Its strength became accentuated by the advent of the Labour Government, as a result of the anticipation of higher taxation. In order to protect the gold stock against the efflux caused by it, the central institution will have to maintain a comparatively high bank rate. This again would prevent a reduction of taxation burdens by means of advantageous conversion operations, and would handicap the increase

of taxable income that would be obtained by a trade revival. We are thus faced by another example when the gold efflux fails to set in motion forces tending automatically to counteract the adverse factors responsible for it. As in the case of the movement of funds through international share speculation, the gold movements caused by this new factor tend to accentuate the anomalies instead of mitigating them.

While the factors of international speculation and the international transfer of short-term funds affect every country, the factor of discrepancy in taxation places Great Britain at a disadvantage as compared with its rivals. If the outflow of funds necessitates the maintenance of a higher bank rate than that of rival money centres, London will lose a substantial part of her international banking activity. This would mean the loss of one of the principal advantages for the sake of which the gold standard has been restored at the price of heavy sacrifices.

CHAPTER VIII

EFFECTS OF GOLD MOVEMENTS

It was explained in Chapter I. that the increased interest of the general public in gold movements since the restoration of the gold standard has been largely the result of the increase of the influence of these transactions on the financial mechanism. Most countries on a gold basis work with a narrower margin than before the war, so that the same amount of gold influx or efflux tends to produce a stronger effect than prior to 1914. Moreover, the psychological influence of gold movements also tends to be greater than in pre-war days. Finally, gold movements themselves are larger, more frequent, and less regular than before the war. Quite apart from special transactions—which are impossible to foresee—even commercial transactions do not occur with the same regularity as in pre-war years.

In the first place, gold movements tend to affect the credit situation. While under the existing monetary system the caprices of gold production tend to determine the world's aggregate monetary resources, the caprices of gold movements tend to determine the monetary resources of individual countries. Our monetary system has been subject to frequent criticisms on account of the excessive influence of gold. This is not the place to deal with the academic controversy as to the wisdom or unwisdom of the system. So long as the

system exists in its present form, gold movements will remain a prominent factor in determining the credit resources of any particular country. In fact, the shipment of gold is the only way by which the total resources of the Money Market can be affected by international operations. There is a great deal of misunderstanding as to the effect of foreign loans, credits, etc., upon Money Market resources. Though these credit movements may have a strong psychological effect, they cannot produce a direct effect unless they result in gold shipments. If a foreign Government raises a loan in London, it can either spend the proceeds in this country or leave them here, or sell the sterling obtained to someone who either wishes to spend it here or leave it here. In either case the sterling amount involved may change its owners, but does not leave the country. If funds are transferred from London to New York, somebody has to buy the sterling amount offered, and the volume of monetary resources remains unchanged. Temporary stringency may, of course, be created at the moment of the change of ownership of funds, but this does not affect total resources in the long run. If, however, the pressure on sterling exchange caused by foreign borrowing or by the transfer of funds abroad results in an efflux of gold, then—and only then—there is a decrease in total market resources.

The effect of the gold efflux can be counteracted, within certain limits, by the central institution's operations in the market. If the Bank of England buys securities to an amount equivalent to the gold efflux, then the immediate material effect of the efflux is neutralised. If, on the other hand, it sells securities to an amount equal to a gold influx, then it can prevent the movement from bringing about an

expansion of credit resources. It cannot go too far, however, in either direction. The change in the note reserve in the Banking Department, if it assumes abnormal dimensions, would compel a change in the Bank Rate. An efflux of gold affects the Money Market through its psychological influence, even if its material influence is neutralised by the Bank's intervention. Similarly, an influx of gold creates optimism in the Money Market even if the Bank counteracts its direct effect by means of selling securities.

A striking example of the Bank's power to counteract the effect of unwanted gold movements upon the Money Market was provided by the case of the Midland Bank's gold imports in 1928. The object of these shipments was to enlarge the basis of credit. They succeeded in bringing about an immediate increase of market resources, but the victory was short-lived, as the Bank of England, disapproving of an expansion of credit—which was contrary to the official monetary policy—sterilised the gold influx within a few weeks by selling bills. In doing so, it had to reduce its earning assets, which was contrary to its own business interests. Had the gold imports assumed much larger dimensions, a stage would have been reached beyond which the Bank would have been unwilling to proceed in its tactics. To assist the authorities in dealing with such situations, the Currency and Bank Notes Act of 1928 has conferred on the Bank of England an additional weapon to counteract the effect of gold movements upon the Money Market. This weapon consists in the right to reduce or increase the amount of the fiduciary issue. Thus an inopportune influx of gold can be counteracted by reducing the fiduciary issue, thus avoiding any sacrifice of part of the Bank's profits through a

reduction of earning assets. Similarly, an embarrassing efflux can be counteracted by increasing the fiduciary issue, thus making the purchase of bills superfluous. It is known, however, that those responsible for the official monetary policy are not in favour of frequent changes of the amount of the fiduciary issue, and would only resort to this weapon in extreme emergency. For this reason the Bank's capacity to counteract the effect of gold movements without changing the Bank Rate remains comparatively restricted in practice, although it appears that the authorities are prepared to witness appreciable fluctuations in the reserve ratio.

Gold movements tend to affect the Foreign Exchange Market, the market for gilt-edged securities and other bonds with fixed interest, as well as the Stock Exchange in general, mainly through their effect upon the Money Market.

The effect of gold movements upon the rates of interest in both importing and exporting countries tends to influence the exchange rate. The shipment of gold from London to New York tends to raise money rates in London and to lower them in New York. As a result, funds will tend to flow from New York to London, which will create an additional demand for sterling, and this, in turn, will tend to affect the exchange rate. Higher money rates in London will discourage foreign borrowing and will tend to relieve the pressure upon sterling due to that factor. Moreover, higher money rates tend to lower the price of arbitrage securities bearing fixed interest, and the resulting efflux of bonds is yet another factor tending to affect the exchange. This factor is at present of little importance, as there are only a few securities with fixed interest which possess a good international market. It appears

probable, however, that the importance of this factor will increase within the next few years. According to an extreme theory, arbitrage in such securities will reach such dimensions as to replace completely, or at least largely, gold movements as a means of the settlement of temporary discrepancies in the international balance of trade. This view may be an exaggeration, but it is not altogether unjustified. Last, but not least, the rise of interest rates caused by the efflux of gold tends to bring about a decline of commodity prices, which, in turn, tends to stimulate exports and discourage imports, and contributes to affect the exchange rate. Similarly, the influx of gold tends to result in an increase of prices and an unfavourable change in the trade balance.

In addition to the effect produced through their influence on interest rates, gold movements tend to influence exchange rates also by other means. They have a direct effect upon the Foreign Exchange Market through the foreign exchange operations which are made necessary or superfluous, as the case may be, in consequence of the purchase or sale of gold. If the shipment is a pure arbitrage transaction it gives rise to foreign exchange operations, while if it is an exchange transaction (for this distinction, see Chapter II.) it takes the place of foreign exchange operations which would have been carried out otherwise. In both cases the shipment tends to influence exchange rates, either in a positive or in a negative sense.

While the demand created by the purchase of gold on foreign account may affect the spot exchange rate to a moderate extent only, the covering operation that accompanies it in most cases tends to have a comparatively substantial effect upon the rate of forward

exchange. Before the war the transaction was covered by means of buying sight drafts. If gold shipped from London to New York was financed in London, the exchange risk was covered by means of selling a sight draft on New York, which was sent on the same boat as the gold, and was presented for payment simultaneously with the collection of the proceeds of the sale of gold. There was no difficulty in getting a fair exchange rate for the sight draft, as there was always a good market in them on mail days, and even large amounts could easily be absorbed without unduly disturbing the exchange rate.

The situation in this respect has undergone a considerable change since the war. The great bulk of foreign exchange business is now transacted through telegraphic transfers, and an active market has been created for forward exchange transactions. Gold shipments are no longer covered, as a rule, by means of sight drafts, but by forward exchange operations. If the shipment is financed in London, the exchange risk is covered by means of selling eight days' forward dollars. Although the market in forward dollars is a good one, it is not always easy to sell a large amount for one particular day without affecting the rate for that day to some extent, especially if the Foreign Exchange Market anticipates the impending gold transaction and is aware of the necessity of selling large amounts for one particular day. It will then expect to obtain a very favourable rate. There is, of course, a possibility of covering the forward exchange by purchases in a number of markets, in which case, however, an additional turn has to be added to the cost of the operation. It is also possible to carry out the covering transaction in advance and to spread the

purchase over several days. In that case, however, a certain amount of risk is involved, unless the spot sterling is also bought in advance, which may or may not be desirable. In the case of the dollar, the difficulties caused by the development of a forward exchange market are comparatively moderate, because the market in forward dollars is very good. In the case of exchanges, however, which have a very inadequate forward market—such as the Canadian dollar—the difference arising from this factor is considerable. For most continental exchanges this factor does not exist, as the shipment of gold may be covered simply by means of selling spot exchange. As spot Berlin exchange, for example, is to be delivered within two days only, and the gold transaction also takes approximately two days, the sale of spot exchange covers the exchange risk. In the case of countries at a longer distance, however, the discount or premium of forward exchange is an important consideration in determining the gold points. Often when the spot rate is evidently beyond the gold point no arbitrage shipments can be made, for the theoretical profit is more than absorbed by the cost of the forward operation. From this point of view, those who wish to ship gold as an exchange transaction, instead of a foreign exchange operation which they would otherwise have to make, are at an advantage as compared with those desirous to undertake the shipment as a pure arbitrage operation. The former need not cover the exchange risk, and are in a position, therefore, to ship gold before it becomes profitable to make shipments for arbitrage.

There is, of course, a possibility of evading the cost of forward operation by means of financing the shipment in the importing country. This is often done,

but it makes no difference as to the cost of the shipment. If a shipment from London to New York is financed in the latter centre there is no need, of course, for a forward exchange transaction, as the proceeds of the sale of the gold may be used for the repayment of the dollar credit. Little advantage is gained, however, by this method. As a rule, gold is shipped from a centre with a lower rate of interest to a centre with a higher rate of interest. As the rate of forward exchange tends to represent the difference between the rates of interest in the two centres it is a matter of indifference whether the shipment is financed in the exporting centre or in the importing centre. Admittedly, the forward rates are subject to influences other than the difference between the rates of interest. In some cases it may be more advantageous to finance the gold shipment in one of the two centres. In theory, however, it may be said that loss of interest through financing the shipment in the exporting country plus the cost of the forward operation is equal to the loss of interest through financing the shipment in the importing country.

There is also the possibility of escaping the cost of forward operation by leaving the exchange risk uncovered. This is not often done, as the chances are that gold shipments will cause a reaction in the exchange, to the detriment of the shipper who attempts to combine gold arbitrage with foreign exchange speculation.

Gold movements tend to affect exchange rates also through their psychological influence. This factor is all the stronger at present, as the exact gold point is not known, and it is only actual shipments that indicate if and when the gold point has been reached. If gold is shipped to London from New York it usually indicates

that the sterling-dollar rate has reached the point beyond which it cannot rise. As a result, there will be profit-taking in sterling; it also becomes worth while to buy dollars, either for speculative or for genuine commercial purposes, for they cannot depreciate any further, and there is a fair scope for their appreciation. Thus the shipment of gold from New York is regarded as a signal to buy dollars; these purchases tend to provoke a reaction in the exchange rate.

The effect of the fluctuation of money rates caused by gold shipments upon the market for fixed interest-bearing securities is too well known to require any detailed explanation. Occasionally, gold movements affect stock prices even before they have produced any effect upon rates of interest. Thus, discount rates, having been pegged for some time in 1927 and 1928, were unaffected by gold movements, but this did not prevent gold movements from influencing the gilt-edged market.

The effect of gold movements upon the share market, though less direct and systematic than their effect upon the bond market, is far from negligible. The prospects of a higher or a lower Bank Rate cannot be ignored in any forecast of the trend of the business situation. A reduction of the Bank Rate may result in an all-round stimulus to production, and the anticipation of improving trade would naturally result in a rise in the market for industrial shares. A higher Bank Rate, on the other hand, tends to produce the opposite effect on trade. It may force the liquidation of stocks at a loss, and would result in a decline of prices and profits. Industrial shares naturally tend to suffer if an efflux of gold threatens to provoke an increase of the Bank Rate.

In certain special circumstances the effect of gold movements upon the Stock Exchange is rather pronounced. For example, Wall Street is sensitive to gold movements which tend to affect the credit situation and the volume of brokers' loans. Several gold shipments from London to New York have been undertaken with the object of stimulating a bull movement on the American stock market.

CHAPTER IX

GOLD POINTS

It is a common but superficial conception to regard gold points as something essentially stable, bearing a fixed relation to mint parities. In reality, even before the war, when the factors determining the gold points were more settled than at present, gold points were subject to changes. Though before 1914 alterations in freight rates for gold were not so frequent as now, the development of transport and the general trend of freight rates did not leave them unaffected. Nor did they escape the influence of local and temporary factors. The rate of interest was naturally an unstable factor, while insurance rates were also subject to alteration. The only items in the cost of gold shipment which remained unchanged for very long periods were the cost of packing and assay, representing a very small fraction of the total cost.

Apart from changes in the cost of gold shipment from time to time, gold points were not necessarily fixed figures even at any given moment. Freight rates were lower for the shipment of large quantities, while insurance rates tended to be higher if a large quantity was shipped on one particular boat. There was, moreover, a difference between the point at which it became profitable to ship gold by banks with offices in both centres concerned, by those having to pay com-

mission on one side, and those having to pay a commission on both sides.

In spite of this relativity and changeability of the cost of gold shipments before the war, cambists and arbitrageurs had a fairly accurate idea as to the figures of the gold points. Substantial and unexpected changes were exceptional; it was possible to work on the basis of the same figures, with minor adjustments and modifications, for long periods. There were, of course, factors which upset their calculations from time to time. For example, when certain central banks were anxious to accumulate gold they granted loans free of interest for the purpose of financing gold imports. In such cases, gold was being shipped even though the exchange was within its theoretical gold points. On the whole, however, there were few unknown factors, and the calculation of gold points was considered as more or less a matter of routine.

Since the war the situation has undergone a fundamental change. As Dr. Vissering pointed out in his presidential address to the shareholders of the Netherlands Bank in 1927, it has become almost impossible to ascertain the point at which gold should normally begin to leave the country. The factors determining that point have become entirely uncertain and subject to changes. Even the price at which central banks buy and sell gold is subject to more frequent alteration than before the war. For example, the Reichsbank, the Bank of France, and the Netherlands Bank have changed their official buying price for gold since they returned to a gold basis. Freight rates have also become a rather unstable item. Before the war the freight charged between London and New York was for many years $1\frac{3}{8}$ per cent. Soon after the restoration

of the gold standard in this country, it was raised to 5s. per £100. From this figure it was gradually reduced to 3s. For some time the Compagnie Générale Transatlantique was competing with the other Atlantic lines, and was cutting the freight rate for gold. Eventually it joined the freight pool, so that, for the time being, the London-New York freight rate seems to have become stable. The New York-London freight rate remained at 5s. for a long time after the London-New York freight rate was reduced, though practically no shipments were made at that rate. Eventually the rate of 3s. has been adopted, but only for shipments exceeding \$1,000,000.

Freight rates between London and the Continent are highly unstable, largely owing to competition. The development of aviation has brought about some changes in the gold points of continental exchanges, through affecting the three principal factors of gold points, viz. freight, insurance, and interest. The extent of these changes has been comparatively moderate up to the present, but they may foreshadow greater ones. Wherever there is direct air service between two gold markets, the aeroplane has a fair chance of competing successfully with the boat. There is, indeed, keen competition between air lines and shipping companies, as a result of which freight rates for gold have been substantially reduced in certain cases. The air service is particularly at an advantage with regard to the transport of comparatively small amounts, as shipping costs are in inverse proportion to the quantity of any single transport, while the cost of air transport is practically the same for small and large amounts. Thus, apart from a general reduction of the cost of gold transport, the adoption of the aeroplane

as a means for gold transport tends to encourage the movement of comparatively small sums. This, in turn, will make gold arbitrage possible for smaller firms which could not hitherto afford it. Before the war the transport of large amounts became profitable while the transport of small quantities was still unprofitable, and the operations of wholesale arbitrageurs usually readjusted the exchange before the retail arbitrageurs had a chance to operate. At present, under certain conditions, the dispatch of gold in small quantities by aeroplanes may become profitable before its transport by ship in large quantities shows a profit. An example to illustrate this development was the export of large quantities of gold to Spain on various occasions, mostly in sums of between £10,000 and £50,000. The transactions were the result of the discrepancy between the peseta exchange and the premium on gold for customs duties, fixed by the Spanish authorities often slightly above the actual market premium. But for the possibility of transport by air, small arbitrageurs may not have had a chance to take advantage of the discrepancy, which would have only justified the shipment of large quantities by boat.

One of the unknown factors is the amount of incidental expenses, which is rather high in New York. When the Federal Reserve Bank desired to be relieved of part of its surplus gold it encouraged shipments the object of which it approved, through delivering the gold free on board, thereby eliminating incidental costs. As this is entirely at the discretion of the Federal Reserve Bank, it constitutes an uncertain item which cannot be budgeted for.

As to insurance rates, there are no fundamental changes as compared with the pre-war situation, as

far as transport by sea and rail is concerned. The insurance rates on air transport have been somewhat unsteady, and have not yet settled at a stable level. Contrary to what appears to be obvious at first sight, insurance rates are not higher for transport by air than for transport by boat. In certain circumstances they are even somewhat lower. In the early days of the transport of gold by air, insurance companies charged higher rates, in the absence of any statistical records. Subsequently, however, they realised that the risk was not so great as they believed. Especially, the risk of a partial loss by pilferage is much smaller than for transport by boat and train. On the other hand, the maximum limit of the amount insured on any particular aeroplane or on any particular day is comparatively low, which tends to restrict the transport of gold by air.

Interest charges have been subject to more frequent and wider changes than before the war, owing to the instability of money rates and the changes in the time of transport. The first cause is, to a certain extent, temporary, as there is every reason to hope that monetary conditions will sooner or later become as stable as before the war. The time of transport tends to decline with the improvement of the means of communication. Some of the fast steamers take only five days to cross the Atlantic instead of six, and there is a possibility of further improvement, which would reduce the loss of interest for long-distance shipments.

The time factor plays an important part in the choice between transport of gold by air or by sea and rail, not only because of the loss of interest involved, but also because gold is sometimes required urgently,

so that the interested parties are prepared to pay even higher transport costs in order to get the consignment more quickly to its destination.

From the point of view of time, transport by air is at an incontestable advantage as far as Western European centres, such as Amsterdam and Paris, are concerned, with which there is a direct air service without interruption. Admittedly the difference is only a few hours, but in the case of Amsterdam this makes a difference of one day's interest, because the Netherlands Bank accepts gold only up to 12.30 P.M., so that gold sent by ship, even though it arrives on the same day, cannot be sold until the next day. The situation is less favourable as far as Central and Eastern European centres are concerned. In theory, there is a saving of one or two days by air transport, but practice has proved that the connections with the aeroplanes from London—especially at Paris, but also at Amsterdam, Basle, and Berlin—leave much to be desired. While the first-class and regular services from London to the centres mentioned are reliable, the services beyond those stations are not yet organised in such a way as to be depended upon.

Another drawback to air service is that sometimes the weather interferes with it, especially in the winter. Further, on fine summer days the bookings of passengers are so heavy that freight has sometimes to be left behind for a later 'plane. Taking all this into consideration, it appears that transport by air is, on the whole, less dependable than transport by sea and rail, so that, instead of the anticipated saving of interest, it sometimes results in an actual loss of interest. In this respect, however, an improvement of the air service will considerably modify the situation.

Further progress of aviation will accentuate its advantages and reduce its disadvantages as a means of gold transport. Air freights are likely to be substantially cheaper in the course of time, and the increasing safety of air routes will reduce insurance rates. Quicker and more frequent air service, as well as the establishment of direct routes for long distances, will result in a considerable reduction of interest charges. It is only a question of time before regular air services are run, not only between London and the more distant continental centres, but even from London to New York and to India, and from the gold-producing countries to London. The reduction of freight rates may be much more pronounced for such long distances than for the existing short routes. Saving of interest will be very considerable. On the basis of a rate of interest of 4 per cent, the saving of, say, four days' interest would represent about £186 on a transport of 100,000 fine ounces. Insurance rates would probably be very high at the beginning, but the improvement of the air service would bring them down to a normal level. The shipping companies, in order to maintain their rôle in gold transport, would have to consent to substantial reductions in the freight rate.

As a result of the successful attempts to cross the Atlantic by aeroplane, the possibility of the establishment of regular air service between London and New York, as well as other centres, is no longer a fantastic dream, though it may take many years before it becomes reality. In South Africa and the Belgian Congo aeroplanes are already being used for the transport of gold from the mines to the principal towns, and the idea of using aeroplanes for transport to Europe is also being considered by mining companies, anxious to save

interest. The establishment of frequent air mail service with India is also a question of a few years.

While the considerable reduction of interest charges through the improvement of the air transport for long distances is a development of the distant future, there is a development in another direction, as a result of which, in certain given circumstances, the loss of interest as an element in the cost of gold shipments may be eliminated altogether. It was the Midland Bank's gold imports from New York in 1928—to which reference has been made in previous chapters—that first raised the question whether it was absolutely necessary to allow for loss of interest when calculating gold points. This question did not arise in the past, as gold arbitrage was in the hands of firms which financed the transactions either by means of borrowed funds, in which case they had to pay interest, or by means of their own funds which would otherwise have earned interest. The necessity of including interest among the expenses of gold shipments was obvious in either case. If, however, a commercial bank undertakes gold shipments, the position is not altogether clear. Commercial banks have to keep in any case a large idle cash reserve. The question is whether gold floating on the Atlantic may be regarded as part of their cash reserve on which they are not supposed to earn interest. If the answer is in the affirmative, commercial banks are justified in omitting loss of interest when calculating the cost of shipment.

The gold import point of the dollar exchange at the time of the Midland Bank's shipments (May and June, 1928) was \$4.8877 if interest was included and \$4.8829 if it was excluded. The exchange rate at the time of the Midland Bank's shipments was around

4·88 $\frac{5}{16}$. Whether the transaction resulted in a nominal profit or a comparatively substantial loss depended on the question whether gold on its way to London could be regarded as part of the Midland Bank's cash reserve. Apparently the question was answered in the affirmative, as official quarters did not object to the shipments on the ground that they were undertaken at a loss. Of course there could be no question of a refusal to buy it, as the Bank of England is under legal obligation to buy gold at the official buying price, irrespective of its origin. If, however, a bank were to import gold at a loss the Bank of England would not fail to intimate to the importer its disapproval of the unnatural transaction. No such unofficial objection was raised, which fact is of particular importance in the case quoted. Everybody knows that the Midland Bank did not undertake the shipment for the sake of the negligible profit it yielded. The real object was to bring about an expansion of the basis of credit. The influx of gold placed before the Bank of England the alternatives of either sterilising the surplus by reducing its own earning assets, or reluctantly consenting to an expansion of credit which was contrary to its policy. The shipments were therefore anything but welcome from the point of view of the monetary authorities. As, in spite of this, no attempt was made to discourage them on the ground that they were undertaken at a loss, and were therefore unnatural, it appears that the principle of disregarding loss of interest has received a tacit official sanction.

The significance of this lies in its general effect upon gold points. There is a marked tendency, since the return to a gold basis, towards the contraction of the margin between gold points. The general adoption

of the practice of disregarding loss of interest would be an important step in that direction. Until now there has been no sign indicating any intention on the part of our commercial banks to take a regular interest in gold arbitrage. As since the war our joint-stock banks have taken up several branches of activity which were outside their sphere before the war—such as acceptance business or coupon dealings, for instance—it is by no means impossible that they will also take up gold arbitrage, to increase the sphere of activity of their foreign exchange departments. Even if they do so, it is by no means certain that they would, as a general rule, disregard loss of interest. American and German commercial banks have been engaged in gold arbitrage for some time past, but they always calculated the loss of interest among the costs of gold shipments, unless they had a special reason to make the shipment.

A number of central banks have also repeatedly made shipments without allowing for loss of interest. The effect of their policy upon gold points is discussed in the next chapter.

CHAPTER X

GOLD POINTS AND CENTRAL BANKS

ONE of the essentials of the system of gold standard is the existence of approximate limits to the fluctuation of the exchanges, upon which the banking and business community may safely depend. Importers in this country should know that, when the dollar exchange has reached gold export point, there is no need for them to cover their dollar requirements in a haste, for there is no risk of a further appreciation. Holders of dollars, in turn, should know that they cannot expect any further appreciation. The Money Market should know when the exchanges are approaching the rates beyond which they are likely to affect market resources by means of bringing about gold movements. One of the conditions of the efficiency of the system is, therefore, that gold points should be ascertainable with a high degree of accuracy. Although they are subject to inevitable changes, it is desirable that these should be comparatively infrequent, and that they should be ascertained as soon as they occur. It is desirable from a practical business point of view, as well as for the purposes of monetary policy, that unknown factors should be eliminated, the elements of uncertainty should be reduced to a minimum; and it is the duty of central banks to pursue that end.

The situation in this respect is, since the restora-

tion of the gold standard, far from ideal. Changes have been frequent, and a great deal of uncertainty prevails—even in official quarters—as to some of the factors affecting gold points. It is characteristic that in July 1929 the Bank of France considered it advisable to have two small test shipments arranged from London to Paris, so as to ascertain the gold import point.

In the previous chapter we indicated some of the circumstances responsible for the instability and uncertainty of gold points since the war. Several of these circumstances, such as the frequent changes in the freight rates, insurance rates, and the wide fluctuations in the rates of interest, are the consequence of the general unsettled post-war conditions for which nobody in particular can be blamed. Central banks are largely powerless against these elements of uncertainty. This is, however, no reason why they should add to them by means of the policy and tactics they adopt from time to time in matters of gold shipments. Their excuse for interference with gold points—if they were to deem it necessary to give any explanation at all—would be that conditions are abnormal and require abnormal measures. So long as these abnormal measures aim at the elimination of special transactions they can only be approved. If, however, they are directed against normal commercial gold shipments and affect gold points the central banks responsible for them lay themselves open to adverse criticism.

One of the means by which central banks interfere with gold points is the policy of arranging gold transactions between each other, instead of allowing free course to gold arbitrage and confining themselves to normal devices of monetary policy affecting exchanges so as to initiate or check gold shipments. In certain

cases the exceptional measures of interference are explained by the necessity for some central banks to increase immediately their gold stocks, so as to be able to establish or maintain the gold standard. On such occasions it is regarded as impossible or inexpedient to leave it to the automatic working of the gold standard to fulfil this task. In other instances the policy is inspired by a desire of saving transport costs. This was the case of the triangular gold transactions arranged in May and June 1929, between the Reichsbank, the Federal Reserve Bank of New York, and the Bank of France, and, to a small extent, between the two former and the National Bank of Belgium. In order to support the reichsmark exchange, the Reichsbank had to sell gold in New York. Instead of shipping gold from Germany, it took over part of the gold earmarked on account of the Bank of France in New York, sold it to the Federal Reserve Bank, and replaced it by means of dispatching gold from its Cologne branch to Paris, which is less expensive than shipments from Bremen or Hamburg to New York. The Bank of France also benefited by the arrangement, as it repatriated free of cost part of its gold held in New York.

The comparative frequency of official transactions has led to the conclusion that there is a general tendency towards replacing normal commercial gold shipments by transactions arranged between central banks. One of the objects of the Bank for International Settlements is to reduce, if not eliminate, by such means, the volume of arbitrage or exchange transactions.

Doubtless, central banks are in a position to compete successfully with private arbitrage even if no change is made in their favour in the existing monetary legislations, and even if they adopt an attitude

of strict neutrality towards private arbitrage—which is by no means always the case. As their gold-holding constitutes in any case an idle reserve which earns no interest, whether in their vaults or on its way between two centres, there is no need for them to allow anything for loss of interest when calculating the cost of shipment. For this reason they are in a position to undertake gold shipments profitably before banks or other arbitrageurs can see their way to undertake them. The gold points for central banks are, therefore, considerably different from those for other banks. There are, in fact, three different sets of gold points, according to whether the shipment is undertaken by arbitrageurs paying interest, commission, and brokerage, banks or brokers paying interest but no commission or brokerage, working on joint account with a bank in the other centre concerned in the transaction, and central banks paying neither interest nor brokerage.

Admittedly, on certain occasions, commercial banks also undertake gold shipments without allowing for loss of interest, for which case the gold points are identical with those of the central banks. If a commercial bank is particularly desirous to carry out a gold shipment, it includes the gold for book-keeping purposes in its idle cash reserves and does not allow for loss of interest. Experience has shown, however, that such cases are exceptional, and, in the predominant majority of cases, commercial banks allow for loss of interest, though the percentage to be allowed for is a matter of opinion in the case of commercial banks, and varies fairly widely. For other arbitrageurs, possessing no large reserves, and having to finance the shipments on the basis of the current market rates, it is, naturally, these rates which determine the amount

to be allowed for loss of interest. Thus, the rule is that central banks are at an advantage as compared with other arbitrageurs, and the margin between their gold points is narrower than the margin between gold points for other banks.

This, in itself, would not be particularly disadvantageous from the point of view of the stability of gold points if it were understood that central banks are always supposed to undertake gold shipments whenever exchanges move beyond their special gold points. This, however, is by no means the case. The primary object of gold transactions between central banks is not profit, and they are not likely to undertake gold shipments merely for the sake of the margin of profit, unless there is also another motive which makes their intervention desirable. Consequently, when the exchanges reach their gold points as calculated for central banks, gold may or may not be shipped, according to the convenience of central banks. This state of affairs is bound to create a feeling of uncertainty in the foreign exchange market, as nobody knows whether or not a further depreciation or appreciation of the exchanges would be checked by gold transactions. While the gold points for private arbitrage provide an approximate limit to exchange movements, the gold points for central banks are merely optional limits which may or may not operate in practice.

As gold points for central banks cannot be relied upon as limits of exchange movements, the influx or efflux of gold through direct transactions between central banks fails to produce the same effect on the Foreign Exchange Market and the Money Market as gold movements of the same magnitude undertaken by private arbitrage. These latter usually result in a

rise or fall, according to the case, in the rates of interest, and tend, therefore, to set the factors in motion which tend to correct the influences responsible for the weakness of the exchange of the exporting country. They also tend to provoke a reaction in the exchange rate itself. On the other hand, if gold transactions are undertaken by central banks this fact is likely to reduce their effect. Though the proceeds of the sale of gold tend to influence the exchange favourably, and the contraction of credit resources tend to create monetary stringency, these tendencies will not be accentuated by the psychological factor as in the case of arbitrage transactions. If a shipment is made by private arbitrageurs it is known that so long as the exchange remains at the rate prevailing at the moment of the transaction, several similar transactions will follow. If, on the other hand, a shipment is made by a central bank, it may or may not be followed by other shipments, according to the convenience of central banks. Possibly after an isolated shipment the exchange is allowed to appreciate or depreciate, as the case may be, until it has reached its natural gold point.

The traditional secretive policy of some central banks constitutes another disadvantage of gold movements undertaken by them. The origin and destination of gold movement by arbitrage proper is usually known. On the other hand, some time may elapse before the origin and destination of shipments by central banks can be traced from the returns of other central banks, which do not necessarily give reliable indication, as often transactions carried out during the period covered by the returns offset each other. The market is left in the dark, which is anything but desirable.

Direct operations by central banks have not so far assumed sufficiently large proportions to interfere with gold points to a great extent, as far as the principal gold exchanges are concerned. On the other hand, the tactics adopted by central banks often interfere with the rates at which gold shipments can in theory profitably be undertaken by private arbitrage, and still more often with the rates at which shipments are actually undertaken—which rates are, after all, the rates that really matter for practical purposes. Minor changes in the actual buying and selling price of gold, aiming at encouraging or discouraging gold movements by private arbitrage, influence the rate at which it is, in theory, profitable to make shipments. Whether gold is actually shipped at that rate often depends upon the attitude of the central banks towards arbitrageurs. Very often, there is unofficial pressure upon banks to abstain from gold shipments even though they appear profitable. It is an open secret that in June 1930 for several weeks the Reichsbank dissuaded the German banks from taking gold from London, although the exchange was well beyond gold export point. Similarly, the Federal Reserve Bank of New York is believed to have put pressure upon American banks to abstain from importing gold from London. As a result, both dollar and reichsmark moved considerably beyond their theoretical gold export points, which caused some uneasiness abroad as to the intentions of Great Britain to carry out gold standard in letter and spirit, and is believed to have been the cause of the withdrawal of some foreign funds from London, accentuating thereby the adverse trend of sterling. Largely as a result of Press criticisms, the unofficial embargo on gold import from London was

raised both in New York and Berlin before it could do much harm; but it was a good lesson to indicate the damaging effect of the interference of central banks with gold movements.

The attempts to discourage undesirable gold shipments, unless they amount to a virtual suspension of the gold standard—as in the case of Canada in 1929—very often fail to attain their end. Gold is shipped in any case as soon as the exchange reaches a point at which the margin of profits is sufficiently large to tempt certain arbitrageurs to disregard the wishes of the authorities. As a rule, central banks can only influence banks and firms desirous of maintaining good relations with them. Firms or individuals without any direct relations with the central bank may disregard the official attitude, and may insist on the letter of the monetary law compelling the central bank to buy and sell gold at a fixed price. These “outsiders” of the gold arbitrage usually work under less favourable conditions than banks, and have to pay brokerage and commission. The margin between the gold points for their purpose is rather wide, but the official interference with gold movements may itself stimulate tendencies causing exchanges to move even beyond these gold points. If an exchange declines below the point which is regarded as its gold points, it may bring about a flight from the currency concerned. The possibility of any pressure on the part of the authorities merely increases the uncertainty as to the rate at which gold is likely to be shipped, without being able to prevent or check gold movements.

Moreover, most central banks do not confine their interference with gold points to mere “peaceful dissuasion”. There are a great variety of weapons at their

disposal enabling them to discourage gold shipments they consider undesirable. The mildest of them is to abstain from assisting in the packing of gold, in which case additional expense is incurred by the transport of bars or coins to suitable premises where they can be packed. The Federal Reserve Bank of New York, which usually delivers gold free on board if it approves the transaction, refuses to grant this voluntary facility to an unwanted gold shipment. The regulations as to assaying are usually sufficiently elastic to allow a fair scope for central banks to raise difficulties should they wish to do so. Usually there is nothing to prevent them from insisting on assaying every bar—even if the bars bear the stamp of an approved central bank—or delaying the payment for part of the consignment. All these tactics, if applied, tend to change the gold points, while the mere possibility of their application tends to create considerable uncertainty as to the approximate figures of gold points.

The method by which the Caja de Conversion of Argentina aimed in 1929 at discouraging gold exports is particularly interesting, and provides a characteristic example. Although it was obliged to convert its notes into gold coins at the official rate, it had the option of choosing the coins it wished to pay out. Apart from the well-known device of supplying worn coins, it was in a position to discourage an efflux by paying out an unwanted category of coins. Thus, when the dollar moved against the peso, a gold shipment to New York was discouraged by paying out sovereigns or mixed coins instead of eagles. Over and above the minting cost, the possible loss of weight at melting had to be added to the cost of shipment, which circumstance affected the gold point considerably.

While it was profitable to ship sovereigns from Buenos Aires to London when the exchange declined to 47·08 $\frac{5}{8}$, it was not until the rate reached 47·02 that the shipment of eagles to London became profitable. On the other hand, the shipment of eagles to New York became profitable at a rate of 0·95 $\frac{3}{4}$, while it was impossible to undertake profitably the shipment of sovereigns to New York until the rate declined below 0·95 $\frac{5}{8}$.

The shipment of coins other than those of the countries of destination involves a risk even if the coins are brand-new, for the loss of weight at melting can not be foreseen. The percentage allowed for the risk varies according to the conservatism of the arbitrageur, and provides an additional element of uncertainty.

The monetary authorities of other countries have other special devices for the discouragement of gold shipments. They also encourage from time to time gold shipments that suit their purpose, by an ingenious variety of means. Almost every central bank on a gold basis has practised at one time or other some kind of means to encourage or discourage gold shipments. As their application is not continuous, the Money Market and the business community never know when to expect interference. The extent to which the interference of central banks affects gold points is striking. Though the normal gold export point of the dollar exchange is just under 4·85 $\frac{3}{8}$, a direct arrangement between the central banks would make shipments possible on a profitable basis at 4·85 $\frac{5}{8}$, and the applications of devices of discouragement of shipments would shift the gold point in practice to about 4·84 $\frac{1}{2}$. The range within which the gold point may move is thus

over one full point, which tends to reduce the benefits of a legally stabilised exchange from the point of view of practical business men.

It would be desirable if central banks and the Bank for International Settlements would bear this in mind. Although their intervention in the domain of gold arbitrage may be occasionally advantageous, they should not overlook the arguments in favour of maintaining a relative stability of gold points.

CHAPTER XI

STATISTICS OF GOLD MOVEMENTS

OWING to the increased importance of international gold movements, it has become desirable, even more than it was before the war, that adequate statistical material should be made available for the use of the business man and the currency expert. Undoubtedly, gold statistics have reached a more advanced stage than most other financial statistics. The returns published by the Customs House and the Bank of England supply valuable material. The information thus given is, however, far from sufficient to meet requirements, and even the available statistics on gold movements have been rather neglected by economists and statisticians. While most text-books on currency contain statistical tables of the world's gold production since the discovery of America, anybody desirous of obtaining figures of international gold transactions for only a few years back has to waste time and energy in collecting for himself from the official returns the material required.

Figures concerning gold movements of most other countries are even less easily obtainable. In this respect the Statistical Department of the League of Nations has made a commendable effort to collect statistics. In its volume on trade balances it publishes figures of the imports and exports of gold for almost

every country since 1911. Unfortunately, however, the value of gold imports and exports of most countries is given in the paper currencies of the countries concerned, so that the figures cannot be used for the purpose of comparison. It would be impossible for anybody except the authorities of the countries themselves to calculate the value of their gold movements in past years in terms of a gold currency. The method of the valuation of gold for the purpose of customs statistics is far from uniform. In some countries it is based on the weekly, monthly, or annual average price of gold, while in other countries the value of every transaction is recorded on the basis of the actual price at the time of the entry. It would be highly desirable, indeed, if the League of Nations could induce as many countries as possible to revise their gold statistics and to convert the figures into a gold currency. Should this prove to be impossible, as far as the figures of past years are concerned, it would be gratifying if current returns at least were based on a stable unit and a uniform method.

Although the statistical material on gold movements published in this country compares favourably with that of most other countries, it is far from satisfactory. The most important source of information is, of course, the returns published in the *London Gazette* twice a week by the Customs Office, containing the total imports and exports of gold declared during the days covered by the returns, as well as their specification according to countries of destination and countries of consignment. (The term "country of consignment" is used in official returns in preference to "country of origin", as the latter indicates the country where the gold was produced, which is unessential from the point

of view of international gold movements.) The monthly trade returns contain the figures of imports and exports declared during the calendar month under review, as well as the figures since the beginning of the current year. The trade returns for December contain the provisional figures for the whole year, while the revised figures appear in the annual returns published in the course of the following year. The difference between the provisional and revised figures is that the former represent the amount declared during the calendar year, while the latter represent the amount actually shipped, even if it is declared after the turn of the year.

It ought to be recognised that the Statistical Office of the Customs House takes every possible care to secure the accuracy of the figures of gold movements. The ablest clerks are usually put in charge of bullion statistics. While merchandise imports and exports are recorded with the aid of a mechanical process, gold shipments continue to be entered in handwriting in old-fashioned ledgers. This difference in treatment is due, not so much to reverence for the Golden Calf, as to the practice of recording more details for gold than for merchandise. In spite of every precaution, however, the material is not altogether reliable, as far as the date of the shipments and the specification according to countries are concerned. The weekly returns often announce shipments several weeks or even months after they have actually taken place, especially as far as exports are concerned, the supervision of which is less strict than that of imports. The means at the disposal of the authorities to penalise delay or inaccuracy in the declaration of gold movements are not sufficiently strong to enforce the regulations in every case. In certain circumstances, it is to the

interest of the shipper to maintain secrecy. In order to prevent their rivals from following their example, shippers may give the country of immediate destination as the final destination of the consignment. The fines are nominal, and it is often tempting to run the risk of being fined. (Needless to say, this does not refer to the well-established firms engaged in gold transactions.) The classification of gold exports as to countries of destination is therefore not absolutely reliable. The same holds good as to the countries of consignment, though to a less extent. The delays in declaration, which may interfere with the accuracy of the totals of weekly and monthly figures, do not influence the revised annual figures. Classification according to countries cannot, however, be regarded without reserve even in the annual volumes.

It would be highly desirable to eliminate this source of doubt, as far as possible, by means of checking these figures. To that end the gold statistics of foreign countries provide a valuable aid. It would be helpful, of course, to obtain statistics as to the insurance of gold. This is, however, impossible. The major part of the gold shipments are believed to be insured at Lloyd's, but that corporation does not publish any statistics about the activities of its members. In any case the amount insured is not necessarily identical with the amount shipped. It is a widely adopted practice to over-insure gold shipments, to the extent of about five to ten per cent. In spite of this, if it were possible for Lloyd's to collect and publish monthly or at least annual figures of the gold shipments insured with its members, many errors might be corrected.

The Customs statistics go back as far as 1852 for exports, and 1858 for imports. The annual totals of

imports and exports since their publication until the end of 1928 are given in Appendix V.

There is every reason to consider these figures as approximately reliable up to the year 1913. During and after the war, however, several circumstances interfered with the accuracy of gold statistics, so that the figures from 1914 to 1925 are of rather problematical value. While sovereigns were calculated on the basis of their face value, bar gold was calculated on the basis of its market value, which was subject to fluctuations, especially after the unpegging of the exchange. It is also doubtful whether sovereigns exported for the Army operating abroad—especially in the Near East—passed through the Customs House. The valuation of gold shipments on account of foreign Governments also gave rise to differences. For instance, in 1920 a large amount of gold which was held in London on American account for some time was shipped to the United States. When it was exported, its value was calculated on the basis of the price of gold at the time when it was imported, although the actual price prevailing in 1920 was much higher. The absence of figures for 1917, 1918, and 1919 is a very regrettable flaw in the continuity of the statistical records of gold shipments. It would be highly desirable if the authorities would publish these figures. It would be equally desirable if the figures for the whole period 1914 to 1925 were to be revised and corrected. As it is, they are misleading, and cannot be used for research into one of the most interesting chapters of war and post-war finance.

The figures of gold imports and exports duly indicate the almost uninterrupted growth of the gold stock of this country before the war. Apart from the period 1877–1886, when there was an excess of gold exports of

about £10 millions, and apart from a few isolated years, gold imports always exceeded exports. A great part of the surplus was, of course, absorbed for industrial requirements, while the rest contributed to the increase of the Bank of England's reserve and the internal circulation of sovereigns. The figures indicate a remarkable increase in the turnover of the London gold market. The total of imports and exports, which was £35 millions in 1858, exceeded £100 millions in the last pre-war year. This was, of course, largely due to the increase in the world's production of gold. In fact, the increase in the turnover of the London market did not keep pace with the increase of gold production even before the war. It will be interesting to observe the tendency in this respect over a long period, after the abnormal movements caused by the redistribution of the world's gold stock have been completed. There is little doubt that direct shipments from South Africa to India and other countries have permanently reduced London's share in the physical volume of the international turnover of gold. This, however, does not mean that London's importance as the world's gold centre has suffered to the same extent. Although the gold does not reach London, it is bought and sold in this market. As to the increase of New York's importance as a gold centre, it is admittedly, in part, of a permanent nature, but it is due in part to temporary factors which will disappear once the process of the redistribution of gold surplus of the United States is completed.

No statistical data whatever are available as to whether gold shipments are commercial or special transactions, although an analysis of the statistical material on that ground is at least as important, from

both a theoretical and a practical point of view, as an analysis according to countries. The difficulties of compiling such statistics are obvious, from what has been said in Chapter II. of the problem of distinguishing between commercial and special transactions. Such data should be published, however, even if they could claim no more than approximate accuracy. It is impossible to form any judgment as to the tendencies of the international gold situation without the aid of such figures. The atmosphere of mystery with which gold transactions are surrounded makes it very difficult, however, to compile any reliable data. This is a shortcoming that ought to be remedied. Our monetary authorities would be in a better position than any other body or individual to compile these statistics, though they even are not always aware of the real motives of shipments.

The daily bullion returns of the Bank of England provide a valuable source of information, though they contain figures of purchases and sales of gold on foreign account only. Until November, 1928, they specified countries of origin and destination for sovereigns, but have since then discontinued to give information with regard to either bar gold or sovereigns. Consequently, we depend in that respect on Customs returns, foreign bank returns, private information, and often merely on inference. This is, however, no justification for neglecting the information supplied by the Bank. It is characteristic of the unsatisfactory state of statistics on international gold movements that such an obvious source of statistical material has been practically disregarded in the past. Though the annual totals of the Bank's purchases and sales of gold on foreign account can be compiled by means of the addition of the daily

figures, it is only since 1925 that such annual figures have been published. No statistics have ever been compiled to cover the pre-war period. To fill the gap to some extent, Appendix IV. gives these totals, compiled from the daily bullion returns, as from 1880. The figures for the period between July 26, 1916, and April 29, 1925, are missing, as the Bank of England suspended the publication of bullion returns in 1916 and did not resume it until after the restoration of the gold standard.

It would be interesting to compare the amount of the Bank's foreign transactions with that of its domestic transactions. There is, however, no information available as to the latter. They do not appear in the daily bullion returns; only the balance of domestic transactions can be calculated from the weekly returns and from the annual balance-sheet of the Bank, while the amount of its domestic purchases and sales is not known.

It appears from the foregoing that much remains to be done to improve the statistical information as to international gold movements. In summarising the desiderata, it is necessary to discriminate between the practical requirements of the Money Market and those of Economic Science. The former urges full and immediate information on gold movements as soon as they have taken place. The latter wants full data covering past periods. In order to meet practical requirements the following improvements may be suggested:

(1) The Customs House should publish daily returns on gold movements, instead of its present bi-weekly returns. Every shipment should be announced on the day it takes place, together with the country of destination or consignment.'

(2) The powers of the Statistical Office to impose

finer on inaccurate or delayed declaration should be widened, and should be fully applied.

(3) The Bank of England should publish in its daily bullion report the countries of origin and destination for all transactions, whether domestic or foreign, whether involving bar gold or sovereigns.

(4) The Bank of England should announce on whose accounts ear-markings and releases of gold on foreign account are made. It should announce at least at the end of every year the total amount of gold held ear-marked on foreign account.

(5) The destination of gold purchases made in the open market by the so-called "Unknown Buyer" should be announced.

(6) Firms undertaking gold shipments should declare whether the shipment is commercial or non-commercial transaction.

(7) Lloyd's should compile and publish figures concerning the insurance of gold shipments concluded by its members.

All this information would be equally useful from a practical and a scientific point of view. In addition, it is to the interest of scientific research to obtain complete statistical information for the past, which is of little immediate practical use to the City man, but which is extremely valuable for research and for its bearing on monetary policy. To meet these requirements, the following improvements may be suggested in addition to those enumerated above: .

(1) The figures for the years 1917, 1918, and 1919 should be published.

(2) The existing figures for the other war and post-war years should be revised and corrected as far as possible.

(3) The Bank of England should publish the figures of its gold transactions for the period 1916-1925.

(4) The Bank of England should publish its annual totals of gold transactions on foreign account since the first establishment of the gold standard.

(5) The Bank of England should publish the annual amount of domestic gold transactions since the first establishment of the gold standard.

(6) The League of Nations should bring pressure to bear on its members to improve their statistical service concerning gold movements, and to complete and correct their statistical material for past years.

(7) The League of Nations should collect detailed information from foreign central banks as to their gold transactions.

It is, indeed, highly desirable to dispel the atmosphere of mystery which at present surrounds the gold market, and which, in the opinion of most experts, is at least superfluous, and is very often decidedly harmful. A well-known argument against publicity is that secrecy is one of the essential advantages of the London gold market, and that its elimination would strengthen the rival gold centres to the detriment of London. This argument is, however, anything but convincing. The chief rival, New York, publishes more details than London, and in some respects, even more details than those contained in the above desiderata. It publishes the name of the shipper, and very often the name of the recipient of the gold, which is in most cases superfluous. In any case, gold is bought and sold in the most favourable market; it is hardly likely that anyone would pay more or accept less for gold, merely in order to keep the transaction secret. In the great majority of cases, foreign customers themselves

do not desire secrecy; they take the first opportunity to disclose the transactions. It would be comparatively easy to arrive at an agreement that the same rules as to the publicity of gold movements should be observed in every gold market.

As the monetary situation depends to a very great extent upon the movements of gold, the public is certainly entitled to the fullest possible information about these movements. As they affect, through the Money Market, producer and consumer alike, they are a matter of considerable public interest, and should not be treated as the business secrets of private firms. If the present policy of secretiveness is maintained, it is likely to strengthen the movement against the gold standard, which is certainly the last thing those responsible for that policy would desire.

CHAPTER XII

FINE GOLD *v.* STANDARD GOLD

IN the course of the process of evolution of the post-war system of gold standard, new situations continue to arise from time to time and experience often compels us to modify our theories, or at least to supplement them with essential amendments. One of the most interesting and most complicated situations ever faced by currency experts was brought about by the decision of the Bank of England on June 6, 1930, to deliver for export bars of standard fineness ($\cdot916\frac{2}{3}$) only, and the attitude of the Bank of France not to accept gold bars of a fineness inferior to $\cdot995$. The situation thus created existed for over seven months, and was brought to an end by the decision of the Bank of France in January 1931 to reduce to $\cdot900$ the minimum fineness of bars it is prepared to accept. During the seven months while the conflict between the regulations of the two central banks lasted, a highly anomalous situation arose which had important repercussions in more than one direction. The question was subject to heated controversy which did not subside until after the French authorities had modified their attitude. Although it is now of purely historical interest—a similar situation is not likely to arise again—it is, none the less, worth while to devote some

attention to its examination in a book dealing with post-war gold movements.

During the seven months ended January 1931, the franc was almost incessantly under the normal gold export point. In order to be able to ship gold from the Bank of England to the Bank of France, however, it was necessary to refine the bars withdrawn from the Bank of England, so as to bring it to a fineness of at least .995. This meant additional expense and delay; the refining charge was subject to frequent alterations between $\frac{3}{4}$ d. and $1\frac{3}{4}$ d. per ounce. The loss of interest caused by the delay, on the other hand, was not considerable because the gold was not withdrawn from the Bank of England until the refiners were in a position to deal with it. In any case, the additional expense involved was highly variable, and introduced a new element of uncertainty as to the figure of the gold point. When the refining charge was $1\frac{3}{4}$ d., the gold point declined to the low level of about 123·65; it fluctuated within a wide range according to the changes of the refining charge.

Even this variable gold point (which may be named "relative" gold point) only held good for a limited amount of gold. The capacity of Paris refiners was negligible, while that of London refiners was gradually raised from about £200,000 to about £350,000 per day. Thus, if on any given day the demand for francs exceeded the amount which happened to be the limit of the capacity of refiners on that particular day, it brought about the depreciation of the exchange considerably below its "relative" gold point. At a given moment, sterling declined in fact to the low figure of 123·50. This gave the impression that, for amounts exceeding the capacity of refiners, there was no gold

point at all, and that, in case of a particularly heavy demand for francs, sterling could consequently have depreciated to an unlimited extent. This was a mistake, however, which was rather dangerous, as it tended to undermine confidence in the stability of sterling. The fact is that the sterling-franc rate never ceased to have an absolute gold point for the transfer of unlimited amounts of gold; this absolute gold point was determined by the cost of triangular arbitrage. As the Reichsbank was prepared to accept bars of standard fineness and was also prepared to pay out fine gold bars, the lowest rate to which the sterling-franc rate could have declined was determined by the expenses of the shipment of gold from London to Paris *via* Berlin. This rate was calculated at about 123.45. Needless to say that, if such operations had been carried out on a very large scale, the depletion of the Reichsbank's fine gold bar stock would have compelled it either to stop accepting bars of standard fineness or to stop the paying out of bars of .995 fineness. Several of the central banks, among others the Swiss National Bank, the Netherlands Bank, and the National Bank of Belgium, resorted to the former alternative in anticipation of a drain on their fine gold stock. There would always have remained, however, the theoretical possibility of shipping standard gold from London to New York and then shipping fine gold from New York to Paris. Absurd as such operations may appear, it is, nevertheless, important to lay down the fact that they were possible to a practically unlimited extent, and that the expense of such operations determined the lowest point (the absolute gold point) beyond which sterling could not possibly have declined. This fact is held to dispose of the belief that

the anomalous situation created between June 6, 1930, and January 16, 1931, removed every limit to a possible depreciation of sterling for that period. The only measure which would have produced that effect would have been a decision on the part of the Bank of France to refuse to accept gold. As a result of such a decision, any strong demand for francs could have brought about the appreciation of the franc exchange to a theoretically unlimited extent. The only central bank which, during the period under review, took such measures was the Swiss National Bank, which was under no legal obligation to accept gold and, desirous of discouraging an influx, availed itself of its right to refuse it. This could have brought about a substantial appreciation of the Swiss franc, but for the measures of the Swiss National Bank to stabilise the exchange at 25·00 to the pound. Although it was urged in some quarters that the Bank of France should follow its example, the French authorities disregarded the advice which might have led to further complications, to the detriment of international monetary stability.

The contrast between the regulations of the Bank of France and the Bank of England produced a considerable effect upon the gold market of London. The South African refined bar gold dealt with in the London market rose to a substantial premium, the extent of which was determined by the fluctuations of the French exchange. The French exchange, in turn, was largely influenced by the refining charge. So long as there was a strong demand for francs, the Paris rate always tended to be in the close vicinity of its gold export point, which again depended upon the refining charge. As there was only one firm of refiners in London

which was in a position to refine gold on a large scale, it was placed for a while in the unique position of determining the sterling-franc exchange rate and the market price of fine gold by means of changing the refining charge. As soon as the insistent demand for francs relaxed, however, the situation was reversed, and it was the refining charge that had to be adjusted to the exchange rate, so as to make it worth while for arbitrageurs to refine and ship gold, in spite of the rise of the sterling-franc rate.

As the capacity of the refiners was limited, it was necessary to book refining facilities well in advance. At one time, refining facilities were booked for over six weeks ahead. It often happened during that period that sterling moved above the relative gold export point, so that it was no longer profitable to ship gold to Paris. As, however, the arbitrageurs engaged refining facilities in advance, they were confronted with the alternative of either cancelling the shipment and paying the refiners a backwardation fee, which was equivalent to half the refining charge, or carrying out the shipment at a loss. So long as the loss was inferior to the backwardation charge, the latter alternative was chosen. It was only when sterling appreciated to such an extent as to make the loss on the shipment bigger than the backwardation charge that the shipments were cancelled. The exchange rate at which it became profitable to cancel shipments, for which refining facilities were engaged in advance, was called the "cancellation point".

The repercussions of the anomalous situation upon the foreign exchange market were also most interesting. The exchanges of the countries, such as Belgium and Switzerland, which followed the French example

in refusing bar gold of standard fineness, tended to move in sympathy with the franc, which brought about some moderate shipments of gold from London to those countries. On the other hand, the exchanges of countries which continued to accept gold of standard fineness, such as the United States or Germany, remained comparatively stable in relation to sterling and depreciated in relation to the franc, bringing about some shipments of gold from those countries to France. Considering that the abnormal appreciation of the franc in relation to sterling resulted in the transfer of funds from London to Paris *via* other centres, and brought about, therefore, a demand for reichsmark, dollar, etc., it is rather puzzling to find why these exchanges did not move against sterling. Failing a better explanation, this phenomenon ought to be attributed to the work of the psychological factor, namely the existence of links of solidarity between the currencies which were on a standard gold basis as against the currencies which were on a fine gold basis.

The question as to who was to blame for the complication of the highly delicate and difficult international monetary situation was subject to heated controversy. In some quarters, it was believed that the situation was brought about deliberately by the Bank of England, so as to discourage the shipment of gold to Paris. As a matter of fact, the Bank of England's decision to cease to pay out bars of fine gold was dictated by necessity, as a result of the depletion of its stock of fine gold bars. Its stock of bar gold of standard fineness has increased during and after the war through the melting down of sovereigns withdrawn from circulation; while, at the same time, it

exported to the United States the greater part of its stock of fine gold. During the twelve months ended May 31, 1930, the Bank sold fine gold amounting to £63,615,000, while it bought only £18,334,000. The bulk of its influx consisted of sovereigns. These figures speak for themselves to prove that fine gold stock of the Bank of England was at a low ebb when, on June 6, 1930, it decided to pay out bars of standard fineness only. In any case, it is a mistake to imagine that the Bank of England benefited in any way from the situation created by its decision. On the contrary, there is reason to believe that the amount of gold taken for shipment to France was, in the long run, much larger than it would have been in normal conditions. Instead of taking a small number of large consignments, French gold importers withdrew a large number of small consignments. While the withdrawal of large amounts within a few days would have resulted in a rise in the discount rates in London and would have thus stimulated natural tendencies to check the efflux, the slow drain of gold failed to impress the discount market and could go on for a prolonged period without setting corrective influences in motion. Thus, it is safe to assume that the Bank of England was, on balance, a loser as a result of the restriction, and that the Bank of France gained more gold by declining to accept bars of standard fineness than it would have gained otherwise. Moreover, the depreciation of sterling beneath its normal gold point caused uneasiness among foreign holders of sterling balances and resulted in withdrawals of funds from London. This again accentuated the adverse trend of sterling, and was responsible for a great part of the loss of gold during the second half of 1930.

In some quarters, the opinion was expressed that, in refusing to accept standard gold, the French authorities aimed at discrediting sterling. Even if this view cannot be accepted, there is no doubt that the obstinacy with which the French authorities maintained their attitude, in spite of its consequences, was to blame for the difficulties it caused. The discrimination of the Bank of France against bars of inferior fineness caused considerable inconvenience also to most central banks, as they each possess a fairly large amount of such bars. It caused inconvenience to the international money market and to the business world in general, as they could not reckon, during the period in question, with the figures hitherto known as representing approximately the limits of possible exchange movements. It caused inconvenience and losses, not in the last place, to French holders of sterling balances, as many of them had to withdraw their funds at a time when sterling was temporarily at an abnormal discount, as a result of the refusal of standard gold by the Bank of France. It is indeed difficult to put forward any argument in defence of the attitude adopted by the French authorities.

From a legal point of view there was nothing to prevent the Bank of France from accepting bars of a fineness inferior to .995. There was an arrangement with the French Mint to that effect, but as the French Treasury controls both Bank of France and Mint, a simple decision was sufficient to alter the arrangements without having to pass any legislative measures. On the other hand, the Bank of England was entirely within its legal rights in confining its gold deliveries to bars of standard fineness. According to the Gold Standard Act of 1925, the Bank of England is only

obliged to pay out gold of the standard of fineness prescribed for the gold coin by the Coinage Act of 1870. It was, therefore, unreasonable to expect the Bank of England to incur expenses by refining its stock of standard bars in order to be able to deliver fine gold. It was for the arbitrageurs to stand the cost of refining if there was a sufficient margin of profits on the shipment to make it worth their while. Had the peculiar situation remained in force for a prolonged period, it would probably have resulted in the gradual refining of all the existing stock of gold of a fineness inferior to the .900, held by various central bankers, originating from the melting down of gold francs, eagles, etc. The process would have been a lengthy one, and, in addition to the inconveniences of the transition period, it would have involved considerable superfluous expense. At the time when efforts are being made to reduce uneconomic expenses caused by international gold movements, through ear-marking operations of central banks and through the projected gold clearing system of the Bank for International Settlements, it would have been anything but logical to incur additional expenses merely in order to raise the fineness of the world's gold stock to the arbitrarily fixed figure of .995. The process would have certainly been a retrograde step tending to increase the number of those condemning the fetish-worshipping of gold. Nobody could possibly put forward any argument in favour of the general adoption of the use of gold bars of .995 fineness for securing the note circulation: it is impossible to see why it would serve that purpose better than bars of .916 $\frac{2}{3}$ or .900 fineness. It is equally difficult to explain the French attitude by considerations of the convenience of the Mint. Apart

from the fact that France does not intend to re-introduce gold coins in circulation, in any case, the fineness of the French coinage has been fixed at $\cdot 900$, so that there was no advantage, even from a technical point of view, in insisting upon a minimum fineness of $\cdot 995$. Whether the gold delivered was of a fineness of $\cdot 995$ or $\cdot 916\frac{2}{3}$, it would have been necessary in any case to change its fineness before using it for minting purposes.

After having persisted in its attitude for over seven months, the French authorities realised, at last, that the solution lies with them. Desirous of showing their willingness to co-operate, they agreed in January 1931 to waive the restriction against bars of standard fineness and to accept henceforth bars of a fineness of $\cdot 900$ or more. The ease with which the change has been brought about proves that it could have been carried out much sooner, so as to save trouble and inconvenience. The immediate consequence of the change was the restoration of a normal state of affairs in the foreign exchange market and the gold market. Sterling rose to its normal gold export point, and the high premium of South African fine gold bars disappeared.

CHAPTER XIII

THE LONDON GOLD MARKET AFTER THE WAR

LONDON is the only centre which possesses an open market for gold. In New York, Paris, and other financial centres, the central bank is the only source from which gold can be obtained in large quantities, and it is the only buyer of gold on a large scale. In London, on the other hand, there is a regular market, independently from the Bank of England. Its development has been made possible by the comparatively wide discrepancy between the buying and selling price for gold of the Bank of England. As the Bank buys gold at the statutory price of 77s. 9d. and sells gold at the price of 77s. 10½d. per standard oz., sellers of gold are often in a position to obtain higher prices for their gold than the Bank's buying price, and buyers of gold, on the other hand, are sometimes able to secure their requirements at a price which compares favourably with the selling price of the Bank of England.

The main source of the supply in the open market in London is the newly produced South African gold. Although part of the output is shipped direct to India, *via* Durban, or to other destinations, and part of it is coined into sovereigns at the Johannesburg Mint and goes either to the vaults of the South African Reserve Bank, or is sent to the Bank of England, the major

part of the supply comes to the open market in London in the form of refined gold bars. The amount offered for sale from that source is subject to fluctuations according to the Indian demand and other factors, but is, on the whole, a fairly steady source of supply and secures the continuity of activity in the London market. It arrives in London every Monday, and is dealt with in the market every Tuesday. Part of it is usually bought by the domestic and continental trade, and some of it is bought for shipment to the East, but the bulk of the supply is usually available for monetary purposes. If the demand for gold is slack, and the exchanges are in our favour, the gold is sold to the Bank of England at its official buying price. If, however, the exchanges are against us, it is often profitable for arbitrageurs to buy it for shipment to another central bank. Even when the exchanges are above gold export point, it pays sometimes to export the gold bought in the open market if it can be secured at a price inferior to the Bank of England's selling price. As is seen in Appendix II., the gold point for gold in the open market varies according to the price paid for it.

The Bank of England itself is often a buyer of gold in the open market, at a price above its statutory buying price, either on its own account or on account of other central banks. The statutory buying price only represents the minimum at which the Bank is obliged to buy any quantity of gold offered to it for sale. The Bank is entitled to pay a higher price if it is keen on securing the gold, so long as it does not exceed its official selling price. On frequent occasions, the Bank acts as an agent for other central banks desirous of replenishing their gold stock through pur-

chases in the open market. As we have seen in Chapter III., an arrangement has been reached that foreign central banks should make all their gold purchases in London through the intermediary of the Bank of England. Our central bank co-ordinates the demand of various central banks, so as to avoid a scramble for gold and to secure for them the lowest possible price.

While it is usually known in the market if gold is bought for the trade or for shipment abroad by arbitrageurs, the destination of the gold bought by the Bank of England in the open market is not disclosed. If it is bought on the Bank's own account, then the bullion bulletin, published on the same day, indicates the transaction. If, however, it is bought on account of one of the customers of the Bank, the market has to be satisfied with the stereotype announcement that the gold has been secured for a destination not disclosed. Very often its destination can be traced in the returns of foreign central banks, though changes in their gold stocks indicated by the returns may be caused also by other transactions. The veil of mystery with which the purchases of the unknown buyers are surrounded is often lifted by the unknown buyers themselves, who announce the purchase of gold.

The South African gold is by no means the only source of the supply on the market. The comparatively small output of British West Africa is also shipped to London, while from time to time quantities varying from a few thousand pounds to amounts of seven figures are offered by special sellers. As a number of central banks have gold deposits with the Bank of England, occasionally our central institution sells gold on their behalf in the open market, so as to secure for its customers a better price than its own buying

price. As in the case of purchases, the origin of these sales is not disclosed, and the unknown seller has of late become almost as popular a figure of the market as the unknown buyer. During the last few years large amounts of gold have thus been sold in London on Brazilian, Spanish, Russian, etc., account.

The war and its consequences have affected London's position as an international banking centre to no slight extent. Her position as the world's principal open market of gold and the principal distributing centre for newly produced gold has also undergone a certain modification, and the trend of development points towards further changes, to the detriment of the London market. The tendency is the result of the operation of three factors, *viz.*, the practice of direct shipments of South African gold, the practice of forward buying of South African gold, and the proposed establishment of an international gold clearing system by the Bank for International Settlements. The first two are already in operation, and tend to become increasingly popular; they deserve attention because of their repercussion on monetary policy. The third factor is still in its initial stage, and its effect upon the London market is yet to be ascertained.

During the last few years the major part of India's gold requirements was met by means of direct shipments *via* Durban. The cost of shipment from Durban to India is a shade over $\frac{1}{2}$ d. per oz., which compares favourably with the expenses of shipment from Cape Town to London and from London to India. During 1926 to 1928, considerable direct shipments were also made from South Africa to South America, especially to the Argentine and Brazil; owing to the unfavourable conditions in South America, this movement has

stopped, but it seems probable that it will be resumed when the tide turns again in favour of the import of gold by that continent.

All these arrangements have diverted so far only a minor part of the South African gold output from the London market. Certain arrangements are, however, under consideration which, if successful, may deprive London of the physical handling of the bulk of the South African gold. It is proposed to establish a regular air service between Cape Town and Cairo in the near future, which would undertake the transport of gold from the Rand Refinery to a special gold depot to be created in Cairo. According to the scheme, the distribution of Cape gold would in future take place in Cairo; the gold dispatched for India would be forwarded by air to its destination, while gold bought for Paris, Berlin, and other continental centres would be forwarded direct to those centres. Although the gold would continue to be bought and sold in London, only the amounts bought by the Bank of England and the home trade would actually be shipped to London.

The significance of the change should not be underestimated. It is true that the amount of labour employed in the physical handling of gold in London is negligible, and the possible loss to British interests for direct shipments of freight between Cairo and continental centres is hardly worth mentioning. The question has, however, another aspect. So long as the gold is actually brought to London before it is sold, the Bank of England is at an advantage as compared with other potential buyers, for, in acquiring the gold, the latter have to pay the cost of transport, etc., from London to their centre, while the Bank of England obtains delivery free of charge.

Thus, so long as sterling is at par, the chances are that the gold will find its way into the Bank of England. Even if sterling is at a slight discount, foreign buyers may be unable to compete with the Bank, especially if the latter is prepared to pay a price exceeding its official buying price, as was the case on several occasions during the last few years. In fact, if the Bank bids 84s. 11½d. per fine oz.—the maximum it can pay for gold, its own selling price being 84s. 11·45455d.—it will secure the gold so long as sterling is slightly above gold export point. Thanks to this advantage, the gold stock of the Bank is in normal conditions replenished out of the newly produced Rand gold, without having to raise the exchange, to that end, above gold import point, by means of high interest rates.

This advantage would disappear if the practice of direct gold shipments were to be generally adopted as a result of the establishment of a gold-distributing centre in Cairo. If the gold is sold while in Cairo, foreign buyers could compete with the Bank of England on an equal footing; in fact, as it is more expensive to forward the gold from Cairo to London than to Paris, Rome, and a number of other centres, the Bank of England would be actually at a disadvantage against those who want to buy the gold for shipment to those centres; it would not be in a position to buy new gold unless sterling is at a premium—sufficiently wide to offset the difference in the cost of transport—against a number of continental exchanges. Consequently, the Bank of England would have to maintain higher rates of interest in London, in order to avoid a depletion of its gold stock, than would be the case if the South African gold were to continue to be brought to London. In this respect, the fact that the

gold, though physically absent, would continue to be dealt with in the London market would make no difference.

It would be desirable, therefore, to prevent a change in the system of transport of South African gold, if necessary by means of some form of subsidy to the shipping company at present engaged in the shipment. So long as the gold is shipped along the West Coast of Africa, London will remain its natural geographical centre for its physical distribution. Even if the gold is bought forward for shipment to another centre it has to be shipped *via* London. Possibly the shipping company will be able to compete with the air line even without any special subsidy, especially during periods of low interest rates when the importance of the time factor is comparatively small, and the saving of about ten days' interest can easily be counteracted by quoting lower freight rates. In a freight-rate cutting contest, the shipping company has the advantage of being able to transport gold with very little additional cost and trouble. Insurance premiums for air transport are likely to be heavy, for, in case of accidents, it will often be impossible to locate the wrecked aeroplanes.

The adoption of the practice of forward buying of gold constitutes also a threat to London's position. While direct shipments are still the exception and shipments *via* London the rule, for some time past the forward sale of South African gold on foreign account has become popular; although the gold thus bought continues to be brought to London, by the time it reaches this market it is no longer available. Thus, the disadvantages attached to direct shipments, from the point of view of the replenishment of the Bank of England's gold reserves, hold good, in certain

circumstances, also as regards the shipment of gold bought forward on foreign account. It is true that, as a rule, it is not profitable to buy forward South African gold unless sterling is under gold export point; the practice was, until comparatively recently, unknown, and has been adopted as a result of the depreciation of sterling in relation to the franc below its normal gold export point during the second half of 1930, brought about by the refusal of the Bank of France to accept bar gold of a fineness inferior to 0.995. The reason why the major part of South African gold output during the second half of 1930 was bought forward on French account the moment it left the Rand Refinery was that sterling was all the time at a rate at which it would have been in any case impossible for the Bank of England to acquire the gold either by forward purchases or after its arrival in London.

A situation may, however, arise—and did, in fact, arise during 1931—in which the possibility of buying gold forward on foreign account tends to diminish the chances of the Bank of England to acquire the gold. This is the case when spot sterling is slightly above gold export point while forward sterling for three weeks is under gold export point. It is obviously an abnormal state of affairs. It is true that whenever spot sterling approaches gold export point, interest rates in London tend to rise above those prevailing in foreign centres, and consequently forward sterling tends to go to a discount in relation to spot sterling. At the same time, however, the fact that the spot rate has reached gold export point and that the forward rate is actually under gold export point stimulates speculative buying of sterling, both spot and forward; and, in normal conditions, the decline of the forward

rate below gold export point is merely a temporary phenomenon. There are, however, three possible factors which may interfere with the operation of this rule:

(1) If the market considers it possible that the free flow of gold between two centres may be handicapped in the near future, then the forward exchange rate may remain under gold export point for a prolonged period.

(2) If interest rates in the centre whose spot exchange rate is at gold export point are persistently higher than the rates prevailing in other centres, then the forward rate is likely to remain under gold export point so long as the spot rate is at, or slightly above, gold export point.

(3) If there is a persistent pressure upon the exchange as a result of an outflow of capital, then the spot rate may remain in the vicinity of gold export point for a prolonged period, and the technical position of the market may result in from time to time a depreciation of the forward rate below gold export point.

The case of the reichsmark provided a clear example of the operation of these three factors. Although it was kept stable for years, there was some doubt in the minds of many people whether the Reichsbank would always be in a position to allow a free outflow of gold. For this reason, the extent to which foreign dealers were prepared to carry an open position in reichsmarks—even if the forward rate is actually under gold export point—was limited. As interest rates in Germany were much higher than abroad, the forward reichsmark always tended to be at a discount, so that, whenever the spot rate was at gold point, the

forward rate was bound to be under gold point. From time to time there was a period of persistent efflux of foreign and German capital from Germany, during which the spot rate remained in the vicinity of the gold export point, while the forward rate declined below gold export point.

A somewhat similar situation arose also regarding sterling during 1931. Whenever the spot rates of franc and dollar were in the vicinity of gold export point the forward rates remained slightly under gold export point. Owing to the fact that on several occasions sterling was below its normal gold export point, foreign exchange dealers abroad were not altogether satisfied as to the certainty of continuous unhampered flow of gold in case of a fresh decline of the spot rate. For this reason there was not a sufficiently strong demand for forward sterling in spite of the fact that it was quoted under gold export point. As interest rates in London were considerably higher than in other leading centres, forward sterling tended to remain at a discount in relation to spot sterling, while spot sterling tended to remain in the close vicinity of gold export point, owing to the persistent efflux of funds through the withdrawal of foreign balances and the export of capital for fear of increased taxation.

In the circumstances it was profitable to buy forward sterling and to cover the exchange risk through buying forward South African gold. This phenomenon may repeat itself frequently, if, as seems possible, the pressure on sterling continues. While in normal conditions higher money rates tend to raise the exchange above gold export point, the withdrawal of foreign balances and the efflux of capital, which takes place irrespective of considerations of interest rates, may

possibly counteract the normal effect of higher money rates, and the spot rate may touch from time to time gold export point. As, in the circumstances, money rates are likely to remain higher in London than in other centres, forward sterling is likely to be quoted mostly at a discount in relation to spot sterling, so that, whenever the spot rate declines near gold export point, the forward rate will usually be quoted under gold export point. On such occasions the Bank of England will be unable to secure any South African gold, as it will be bought forward on foreign account. But for the possibility of buying gold forward, it would stand a good chance of buying the gold on its arrival at its maximum buying price of 84s. 11 $\frac{3}{8}$ d., by means of raising the spot rate slightly above gold export point. So long as, however, it is profitable for foreign buyers to pay 84s. 11 $\frac{1}{2}$ d. they will outbid the Bank whenever the forward rate is a shade under gold export point. Against this, a slight rise of the spot rate is of no avail, as experience shows that on such occasions the discount of the forward rate usually widens in proportion with the rise of the spot rate. In order to be able to secure the South African gold, the Bank would have to bring about a rise of the spot rate considerably above gold export point, which again necessitates higher interest rates in this market. Possibly if the Bank of England were to buy gold forward, as it did on several occasions in the past, and would be prepared to pay for it as soon as the gold leaves the Rand Refinery, it would stand a better chance to secure the gold; though, if the foreign buyers are willing to follow its example and disregard loss of interest, there would be no advantage in the adoption of the practice. Nothing but a policy aiming

at higher money rates in London could secure the newly produced gold for the Bank of England. Thus, as in the case of direct gold shipments from South Africa to foreign centres, the change in the practice of the gold market has operated to the disadvantage of London, as it tends to check the process of automatic replenishment of the Bank's gold reserve, and necessitates the maintenance of interest rates in London at a higher level than would otherwise be the case, in order to be able to maintain the gold stock at a given figure.

The adoption of the practice of direct shipments and of forward dealings in gold provides an interesting example how apparently insignificant points of technical detail, hardly noticed by those who are not directly concerned with practical gold arbitrage and exchange dealing, can influence the general situation of the Money Market, and how it may affect the monetary policy of the authorities.

CHAPTER XIV

THE POST-WAR GOLD STANDARD

As we pointed out in Chapter I., the meaning, scope, limitations, and interpretation of the gold standard, and the spirit in which it is applied, are not the same as they were before the war. Currency legislation has been changed in every country, but the unwritten laws which also play a very important part in the application of monetary systems have not yet had time to become crystallised. It is already obvious, however, that they are substantially different from those ruling in pre-war days. In the course of the experience of the last three years, several new principles have been adopted. Some of them have been embodied in currency legislation, while others exist only in practice. Time alone will tell whether any of these principles will survive the transition period we are experiencing at present.

It is only natural that, after the greatest financial upheaval in history, the readjustment of monetary conditions should require a number of years. The preliminary condition of the smooth working of the gold standard is economic, financial, and psychological equilibrium. Most countries which returned to gold had not reached a sufficiently advanced stage of progress towards this equilibrium. Apart altogether from the situation of individual countries, international factors over which no single country has control have also

added to the risk attached to the return to the gold standard during the period 1925-1931. From a scientific point of view the restoration of the gold standard in most countries was decidedly premature. In spite of this, the courageous act of those responsible for the currency reforms was justified, for the act of legal stabilisation has itself contributed to a very great extent to create economic, financial, and psychological conditions which make the normal working of the system possible. The alternative solution would have been to wait until production and international trade had found their new level, and budgets, international debt, capital market, and international balance of payments, had once more become normal, and public confidence had once more been restored. For most countries this would have taken a great number of years if an inconvertible paper basis had been maintained. As it is, their bold gesture in returning to gold in spite of unsettled conditions has brought them much nearer to equilibrium.

It is understandable, however, that, in the circumstances the post-war gold standard has been rather fragile in some countries during the first few years of its application. It has been a delicate hothouse plant, needing very gentle and considerate handling. If it were exposed to the elements before it had time to gather sufficient strength, it would be doomed to perish. To have yielded to the demands of doctrinaireism would have been fatal. Undoubtedly, the ideal state of affairs is to let the gold standard take care of itself, for its principal advantage lies in the automatic nature of its working. In theory, an efflux of gold should not give rise to any uneasiness, for it would tend to bring about its corrective by its effect upon Money Market,

Foreign Exchange Market, Stock Market, and price levels. In practice, an excessive rise in money rates on account of a heavy gold efflux would provoke a wave of indignation among the public, which would end in the abolition of the gold standard. Thus those who insist upon the full application of the principle of *laissez-faire* to the gold standard are a greater danger to the system than the adherents of a managed currency.

It has been necessary for every country—with the exception of the United States—to admit certain restrictions upon the full application of the gold standard. Sweden, the first European country to return to gold after the war, considered it advisable to maintain the restriction upon the import of gold, so as to avoid a repetition of the inflation caused during the war by an unwanted gold influx. Other countries were willing to run that risk, but considered it necessary to defend themselves against the menace of an excessive gold efflux. To that end a number of countries—among others, Holland and Denmark—have adopted the principle of reciprocity as to gold exports. They raise no obstacle to the export of gold to countries on a gold basis, but the export to countries where there is no free gold market remains prohibited. This rule may be contrary to the principles of a pure gold standard, but necessity justifies it. It protects small countries from being deprived of their gold reserve by bigger countries who can afford to buy their stocks at a loss. Even larger countries should benefit by it, though they may consider its application as a sign of weakness. From a general point of view, it provides an additional inducement for the return to a gold basis, as it draws attention to the inferior posi-

tion of countries with an inconvertible currency. It is, indeed, hardly fair that countries which have no immediate intention of returning to the gold standard should hoard large amounts of gold, withdrawing it from the countries which are in active need of it. Discriminatory measures against such countries are, therefore, justified. It would be desirable if the principle of reciprocity were to be adopted by every country. Only countries whose gold market is free both in law and in practice should be allowed to buy gold.

Admittedly, the practical application of the principle meets with difficulties. The gold purchased in a country whose gold standard is based on reciprocity may be deposited in a country with a free gold market, on account of a country with an inconvertible paper currency. It is believed that such action was actually taken by France in 1927, when gold purchases from Holland were deposited in New York. If reciprocity were adopted as a general practice, means could also be found to prevent the circumvention of the principle.

The significance of the principle of reciprocity tends to diminish with the increase of the number of countries on an actual gold basis. Possibly it may survive even after every modern country has returned to the gold standard, in the shape of an embargo on gold exports to countries which, though legally on a gold basis, prevent in practice the export of gold by artificial means.

Another important principle which has been established as a result of the experience of the last few years is that of the non-interference of central banks with each other's gold reserves. This principle, to

which reference has already been made in previous chapters in connection with recent French and German gold purchases, is not generally adopted, any more than the principle of reciprocity. Unlike the latter, it is not embodied in any currency legislation. The main object of the co-operation of central banks is to secure its general adoption, so as to prevent a reckless scramble for gold, with all its undesirable consequences on price level and on international monetary stability. According to this principle, monetary authorities should not take the initiative in the purchase of gold from other central banks unless their action is approved by the central banks whose reserve is thereby diminished. Orthodox adherents of the gold standard criticise this rule on the same ground as that of reciprocity, for both aim at restricting the free working of the gold standard. In their opinion, once the convertibility of notes and the freedom of gold exports is declared, foreign monetary authorities have the same right as private individuals or firms to avail themselves of this freedom. Doubtless, from a legal point of view, discrimination is out of place. It has been realised, however, that unless some kind of restriction is placed upon the demand of monetary authorities, the pressure upon the gold reserves of the few countries giving a literal interpretation to the freedom of the gold market might become unbearable. It would be likely to lead to the suspension of the gold standard in some countries, which would cause a general setback to international monetary reconstruction, and would be contrary to the interests of the purchasing countries themselves.

The question is whether to sacrifice the doctrine of *laissez-faire* or the prospects of international financial

reconstruction. Fortunately, common sense has prevailed over doctrinairism. It has been agreed that the post-war gold standard has not been established for the purpose of giving central banks a free hand to satisfy their needs at each other's expense, but for the purpose of supplying gold for normal commercial requirements. It is in order to secure the continuity of facilities for the benefit of commercial requirements that the principle of non-interference has been admitted.

The simplest way to enforce the principle would be to embody it in the monetary legislation of countries on a gold basis. Most countries would be reluctant, however, to do so, because it is regarded as an admission of weakness. This difficulty could be overcome if an international understanding could be reached to include it in the monetary laws of all countries on a gold basis, weak and strong alike. It would be a temporary measure, which could be abolished in a few years, when the redistribution of gold is completed and the scramble for gold is over. As it would be difficult to arrive at such an international understanding, there exist other means of achieving the same result, such as the co-operation of central banks reinforced by the activities of the Bank for International Settlements. Although the movement of co-operation has made good progress its results are far from satisfactory. There are still central banks which, directly or indirectly, violate the letter or the spirit of the principle of non-interference. One reason for this is that moral pressure has not been enlisted to a sufficient extent to enforce its strict observance. The movement of co-operation of central banks works in accordance with the old-fashioned methods of secret diplomacy, behind closed doors. with a com-

plete exclusion of publicity. At the conferences which are held from time to time, only the principal central banks are represented, while contact with the smaller central banks is maintained by occasional visits and through the annual meetings of the Bank for International Settlements. Secrecy is carried so far as to prevent the central banks from reaping the moral benefit of their willingness to co-operate. For instance, the Press criticisms directed against the Bank of France in 1927 when it embarrassed the market by its gold purchases continued long after it had agreed at Washington to discontinue these purchases. It was not until some months afterwards that the fact that an understanding had been reached was unofficially disclosed. This method is hardly likely to encourage the spirit of co-operation among central banks. The strength of the moral pressure against the disturbers of the peace could be multiplied by enlisting the support of Press and public opinion in favour of the loyal banks and against the disloyal ones. If the League of Nations were to use the same secretive methods as central banks it would be of little use to the cause of peace. It could do very little to prevent a war without making use of its principal weapon, *i.e.* its influence upon international public opinion.

Owing to inadequate publicity, the man in the street is ignorant of the principles which govern central banking co-operation, and is not in a position to support the movement by condemning the action of those who jeopardise its success. What is required is a public international conference at which the claims of central banks to increase of their gold reserve could be examined by an impartial body of experts, under the auspices of the Bank for International Settlements,

who would elaborate a scheme regulating the demand. Such a conference would probably produce better results than the work of the Gold Committee of the League, which was carried on behind closed doors, and whose report was a compromise without much practical value. Although the decisions of such a conference would not be enforceable any more than are the decisions of the League, most central banks would hesitate to provoke international public opinion by disregarding them. The same conference should attempt to codify the rules under which the post-war gold standard works. If it were impossible to obtain the consent of all countries to embody in their currency legislation the necessary restrictions to the free working of gold standard it would at least be possible to reinforce the principles involved, through its endorsement by an international body of experts. It should be made clear that the refusal of a central bank to part with an unreasonably large amount of gold intended to be withdrawn by a foreign central bank without regard to the exchange situation, should not be regarded as a suspension of the gold standard. From a scientific point of view such a modification of the system of gold standard in practice may not appear to be ideal, but necessity justifies it. After all, if the letter of the law were to be strictly applied and every monetary authority that insisted on meeting its requirements at the expense of some other central bank were to get its pound of flesh, it would soon become difficult to meet commercial demand, and the gold standard would have to be suspended altogether. It is better to maintain a restricted but safely established gold standard rather than an unrestricted one with the prospects of its early suspension.

. Other principles of the post-war system of gold standard are the abolition of the use of gold coins and the restriction of the domestic use of gold. The former is almost generally admitted. Although before the war it was difficult to imagine the gold standard without coins, the conception has changed to such an extent that to-day even orthodox adherents of the system consider coins unessential. In some countries, such as, for example, South Africa and Holland, the use of coins has been revived. This is understandable in the case of the former, which is the principal gold-producing country, but it is difficult to understand in the case of Holland, for it had practically no gold coins in circulation before the war. Its post-war experiment to introduce coins aimed mainly at reducing the idle reserves of the Netherlands Bank by the creation of a secondary reserve in the shape of gold held by the public. As most coins were exported, however, the experiment has been practically discontinued. The trend of modern development points towards the complete abandonment of coins as means of payment in modern countries. The restriction upon the internal use of gold, aiming at preventing banks from creating gold reserves of their own, is also a modern tendency of a lasting nature. Though both changes are the result of the temporary shortage of gold, they are likely to survive the shortage, as they are in accordance with the tendency towards a more scientific monetary system. Possibly within a decade the international circulation of gold will be more free than even before the war. It is most unlikely, however, that its internal circulation will ever be restored.

The frequency and importance of special transactions since the war have made it desirable for monetary

authorities to discriminate as to the motives of gold shipments. Before the war, when gold movements were mostly due to natural causes, they had the advantage of drawing the attention of monetary authorities to the existence of unsound monetary or economic tendencies. In addition to the automatic correction of these tendencies by the gold movements themselves, the monetary authorities were thus enabled to take steps to counteract undesirable currents. All they had to do was to protect their gold reserve against an undue reduction or increase. In fighting against factors tending to deplete their gold stock or to increase it beyond necessity they tended to readjust any deviation of economic life from its normal course.

The situation has undergone a considerable change since the war. A great part of gold movements is no longer the natural outcome of economic tendencies but the result of arbitrary human decision, often in defiance of natural tendencies. This necessitates a reconsideration of the attitude of monetary authorities towards gold movements. It is desirable to discriminate between transactions brought about by natural factors or by unnatural factors. The former are the outcome of undesirable economic tendencies, so that, in endeavouring to protect its reserves, the central bank tends to counteract these undesirable tendencies. The latter are completely independent of any economic currents. In endeavouring to check them, the central bank does not in any way pursue the end of protecting economic life from disturbing influences. On the contrary, the measures taken for the protection of the gold reserve may themselves disturb economic equilibrium, in addition to the unfavourable influence of the gold movements. Thus in

the case of gold movements through special transactions—or through exchange transactions brought about in abnormal circumstances—the task of the defence of the gold reserve is no longer identical with that of the regulation of economic life. The protection of the gold reserve in that case becomes, not a means to an end, but an end itself which requires considerable sacrifices.

It is only if gold movements are caused by economic factors that they should be counteracted by changes in the Bank Rate. If they are caused by factors independent of economic tendencies, then the task of the authorities should be confined to neutralising the effect of the efflux on trade. Thus if abnormal factors are responsible for a decline of the gold reserve, it is a mistake to counteract it, in face of depressed trade, by means of contracting the volume of currency. If in such cases the monetary authorities have to choose between protecting their reserve and protecting the economic interests of the country, they ought to choose the latter alternative. In order to avert an inopportune and economically unjustified increase of the Bank Rate, it is worth while to sacrifice part of the gold reserve. What is wanted in such circumstances is a liberal interpretation of the gold standard. The rigid application of its orthodox principles in spite of the changed circumstances, without discrimination as to the causes of the movement, is likely to result in a great increase of the number of those who believe that our salvation lies in the adoption of a managed currency. While it is desirable that normal gold movements should continue to be dealt with in the same way as before the war, abnormal movements, if they cannot be avoided by co-operation, should at least be prevented from

unduly disturbing economic life. During a period when abnormal transactions are likely to occur frequently, a liberal interpretation of the system is essential. In view of the abnormal nature of the gold movements, the monetary authorities should not hesitate to make use of exceptional means. In the case of Great Britain, the deflationary effect of an abnormal efflux of gold can be neutralised through the application of Clause 8 of the Currency and Bank Notes Act of 1928, by virtue of which the fiduciary issue may be raised for a period not exceeding six months. The increase of the fiduciary issue would not in any way check the efflux of gold, but it would protect trade against the adverse effects of a decline of the gold stock. Contrary to what may appear to the superficial observer, an increase of the fiduciary issue does not result in an increase of the active note circulation, but merely an increase of the part of the note issue which is covered with securities instead of gold. The increase makes it superfluous to contract currency, in spite of an efflux of gold. It would be, of course, a fatal mistake to neutralise normal gold movements by such exceptional means. It would be equally unwise, however, to attempt to check abnormal movements with the aid of the Bank Rate.

There is an intermediate solution between the orthodox method of counteracting gold movements, irrespective of their causes, by means of changes in the Bank Rate, and the revolutionary method of making frequent use of the emergency measure of changing the fiduciary issue. This solution is to allow the reserve ratio to fluctuate within much wider limits than before. The possibility of raising the fiduciary issue if necessary enables the authorities to view with equa-

nimity a considerable decline in the reserve ratio. It would be desirable that the principle and practice of the elasticity of the reserve ratio should be adopted also by other countries. In doing so, they would reduce the adverse influence of gold movements upon the stability of interest rates.

CHAPTER XV

FUTURE OF GOLD MOVEMENTS

As was stated in Chapter XI., there is a tendency towards cheaper and quicker facilities for gold shipments. Improvement in the means of transport and the progress of commercial aviation tend to reduce the loss of time, while competition between different transport enterprises tends to reduce the freight rate.

Apart altogether from the possibility of a further reduction of the loss of interest through speedier transport and a downward trend of money rates, there is a possibility of its complete elimination from the cost of gold shipment, if the idea of regarding gold in course of shipment as part of cash reserves should become generally adopted. Thus the chances are that the contraction of the margin between gold points will continue. At the same time, the factors responsible for gold movements, which, as was stated in Chapter I., are stronger and more numerous than before the war, are likely to remain abnormal for some time. The transfer of reparations and inter-Allied debts, the process of readjusting the dislocated international balance of indebtedness, the redistribution of the world's gold stock, the adoption of the gold standard by new countries, the wide difference in rates of interest prevailing in particular countries, would in themselves

be sufficient to increase commercial gold movements beyond their pre-war figures, even if the contraction of gold points did not facilitate shipments. In addition, the volume of gold shipped through special transactions is likely to remain comparatively high for some time.

In the circumstances, it is easy to understand the desire prevailing in some quarters for a reduction in the volume of gold movements, a great part of which is considered superfluous. In this respect it is necessary to discriminate between two aspects of the problem, *viz.*, the fluctuation of gold reserves and the physical displacement of gold. There is no doubt that gold movements, so far as they cause instability instead of tending to eliminate instability in economic life, are undesirable. Yet the redistribution of gold, inconvenient as it may be while it is going on, is a necessary evil, as it tends to eliminate the discrepancies between money rates in different centres. This is a natural process to which no exception can be taken, so long as it is carried through with the least possible disturbance to the international markets. What is generally objected to by many critics is the movement of gold to and from a given centre as a result of seasonal and other temporary factors. For example, gold to an amount of £6,684,840 was imported from the United States to Great Britain during 1928, while £6,602,592 was exported from Great Britain to the United States during the same year. These movements in both directions, which offset each other completely, were due to temporary factors tending to produce their own corrective. They caused considerable fluctuations in the Bank's reserve, which is considered anything but desirable. Part of the gold shipments, it is

pointed out, would not have been made at all but for the reduction of cost through disregarding loss of interest.

A characteristic example of superfluous gold movements caused by the low costs of the transaction is the movement between the United States and Canada. The margin between gold import point and gold export point is very narrow, and comparatively moderate exchange movements may result in shipments in both directions. In fact, gold is taken in both directions sometimes almost on the same day, as a result of a comparatively modest reaction in the exchange rate. It would be anything but desirable if a similar situation were to arise between a number of other countries. In the case of Canada and the United States, the frequency of gold shipments does not cause much trouble; the reserves of the United States are too large to be affected considerably by Canadian shipments in either direction, while the money market in Canada is not sufficiently developed to be affected by these changes to a great extent. While comparatively small shipments are sufficient to bring about a reaction in the Canadian exchange, much larger shipments are required to produce the same effect on the United States dollar, which has a very wide market. Should gold movements between London and New York become as frequent and irregular as those between Montreal and New York, it would have a distinctly unsettling effect upon our market.

It is true that the frequency of gold movements tends to reduce the fluctuation of exchange rates. This advantage is, however, negligible, for fluctuations between the existing gold points are too narrow to cause any harm. Their further contraction would not

compensate business interests for the increased instability of the basis of credit supply. The question may be raised, therefore, whether it would be desirable if some means could be found to check the tendency towards the contraction of gold points.

Any interference with the normal working of the gold standard would have, however, considerable disadvantages. It should be remembered that, while gold movements, if caused by external influences, tend to unsettle the Money Market and economic equilibrium as a whole, in certain circumstances they have the opposite effect. As was shown in Chapter VIII., they tend to correct unfavourable monetary and economic currents. Thus, while it may appear desirable to prevent abnormal gold movements, it is certainly not advisable to check normal gold movements artificially.

A method by which many central banks successfully endeavour to reduce gold movements is intervention in the foreign exchange market with the aid of their foreign exchange reserves. This method already existed before the war, but its application has become more general since the restoration of the gold standard. It is to be regretted that the Bank of England, having no adequate foreign exchange department, cannot follow the example of continental central banks in this respect.

Little attention is paid, however, to this aspect of the problem of gold movements. Much more is said and written about the need for a reduction of the physical movement of gold. While in most cases when gold is actually moved from one country to another it involves a change in the reserves of the central banks involved, such changes often occur without any actual

displacement of gold. In many quarters no objection is raised to the changes in reserves so long as they do not involve physical movements of gold. It is only actual shipment that is disapproved. If a foreign central bank earmarks gold abroad for window-dressing purposes and releases it after the turn of the year, this operation is not criticised. If, however, the gold is moved backward and forward to the same end it is criticised on the ground that it involves unnecessary expenditure. It is condemned, therefore, as wasteful from a general economic point of view. To avoid such waste, arrangements have been made by several central banks to establish reserves in foreign centres, at which gold is accepted at the official buying price minus theoretical costs of the shipment to the banks' head offices, and from which gold can be bought at the official selling price plus shipping costs. Other central banks prefer the method of earmarking and releasing gold at foreign central banks.

Some critics have even suggested the establishment of a central gold reserve which would play the part of an international clearing house for gold. Instead of paying out gold the central banks would draw upon this reserve and would accept in place of gold their own drafts upon the central reserve, or those of other member banks. Gold movements for monetary purposes would then be confined to the replenishment of this reserve and the repatriation of a permanent surplus. The adherents of this scheme welcomed the establishment of the Bank for International Settlements mainly because they hoped that it would eventually become the keeper of an international gold reserve. Even if the difficulties caused by political and financial jealousies between nations could be overcome—which

is doubtful—there would be little to be gained through the application of such a scheme. It would not diminish the fluctuations in individual gold reserves, but merely the physical movement of gold. Instead of being carried across frontiers or overseas, the metal would be moved from one vault to another, or would not move at all, and a book-keeping entry would take the place of physical movement. The adherents of this scheme recommend it on the ground that it would save superfluous expenses. If that is its only advantage—and it is difficult to discover any other—it is hardly worth the trouble to make a change, for the total expenditure involved in gold shipments all over the world is hardly more than a few hundreds of thousands of pounds per annum. A great part of this represents loss of interest, which, from the point of view of the wealth of nations, is merely a fictitious loss. The rest is earned by shipping companies, insurance companies, bullion brokers, etc., and can hardly be regarded as waste, especially as their profit is nobody's loss. The central banks themselves make a profit on gold movements, as they repurchase gold at a lower price than they sell it. All that happens is that the surplus commercial value created by arbitrage is divided up among the interests involved. As to actual material waste, it is negligible. The amount of human labour expended on gold movements is very small, and the quantity of fuel wasted on superfluous gold movements is hardly worth measuring. In fact, owing to the small weight and volume of gold as compared with its value, it may be said that gold transported by sea and rail scarcely necessitates any extra fuel. As to transport by air, it necessitates additional aeroplanes, but this has the advantage of contributing to the development of com-

mercial aviation. The only real material waste is the occasional loss of gold in the course of transport. This is very small, however, in proportion to the total transported; gold is usually shipped by first-class steamers, on which the risk is negligible. It appears, therefore, that the advantages of reducing the physical displacement of gold hardly compensate for the complications of the scheme, and for the difficulties it would have to overcome.

The Bank for International Settlements has adopted an intermediate solution. Its international gold clearing system does not aim at monopolising gold transactions or eliminating them altogether through the establishment of a central gold reserve at Basle, but it is calculated to reduce the volume of gold shipments. The new system tends to encourage the practice of replacing gold shipments between central banks by book entries. It does not, at its present stage of development, encroach upon the premises of private arbitrage, but aims at simplifying transactions which would have been carried out in any case by central banks. In doing so, it saves shipping costs for the central banks, which is desirable from the point of view of their earning capacity, but the public interest involved is negligible. Possibly sooner or later the Bank for International Settlements may establish a gold reserve at Basle, but it seems highly probable that it would continue to keep the major part of the gold it receives on deposit in other centres.

At this stage, it is impossible to express an opinion as to the ultimate effect of the activities of the Bank for International Settlements upon gold movements. It seems highly probable, however, that even when

the development of the gold clearing system has reached an advanced stage, there will be a fair amount of gold movements, and a large proportion of them would continue to be carried out by private arbitrage.

APPENDIX I

GOLD POINTS OF THE PRINCIPAL EXCHANGES

THE calculation of gold points is, in theory, a matter of simple arithmetic. In practice, however, it presents a number of difficulties, many of which can only be overcome by means of direct experience gained through actual gold shipments. The changes in the factors that determine gold points and their instability, as well as the existence of unknown factors, have rendered the calculation of gold points rather difficult and unreliable. While before the war the approximate figures of the gold points of currencies on a gold basis were a matter of general knowledge, at present the number of exchanges the gold points of which is known at least approximately, is very small. Some countries which have returned to a gold basis have not announced the official buying price of gold. The selling price of gold has little practical meaning, from the point of view of international gold movements, in the case of countries which have adopted the gold exchange standard. As the only kinds of gold shipments made to and from these countries were either special transactions or purchases for industrial purposes, made without regard to gold points, arbitrageurs had no opportunity to ascertain all factors determining the gold points.

Freight rates are fairly definitely settled in certain relations, while in other relations in which there have not been many shipments since the war they are a matter of negotiations. The keen competition between air lines and shipping companies for gold shipments between London and continental centres results in frequent change of freight rates. It is useless to ask transport enterprises for the quotation of freight rates for such relations unless and until there is an actual shipment.

Insurance rates are also subject to frequent alterations. They largely depend on the quantity shipped on a single boat, which is not known in advance. Occasionally special arrangements are concluded ("floating policies") between banks and insurance companies for the insurance of a certain amount of gold if and when shipped, but in the majority of cases the rate is subject to fluctuation. The amount insured is also an item with regard to which there is no uniform rule. It is a popular habit to over-insure gold shipments to an extent of 5 to 10 per cent. While the approximate extent of over-insurance is comparatively settled for shipments to the East it varies widely according to firms for shipments between London and New York or London and the Continent.

As to loss of interest, it was customary in pre-war textbooks to take the Bank Rate for basis. In normal circumstances, however, if the shipment is financed in London, the rate of interest is slightly under the Bank Rate, while in most other centres it is slightly over the Bank Rate. For banks possessing liquid resources to finance the shipment, it is largely a matter of individual opinion how much they want to earn on their funds thus used. It is becoming an increasingly popular method to leave out interest altogether from the calculation of the cost of shipment, and to express the profit on the transaction in terms of percentage representing the yield of the capital used for financing the shipment. For shippers possessing no idle reserve, the item of interest is determined by the rate which they are able to obtain for their funds if they use them in the Money Market. If the shipment has to be financed with the aid of borrowed funds the rate of interest is determined, of course, by the rate at which the shippers are able to borrow. The time of shipments for which the loss of interest is calculated is a factor which leaves wide scope for the difference in the temperament of arbitrageurs. If they are speculative they take the minimum time without allowing for the possibility of adverse circumstances which may delay the transport. If they are conservative, they leave a safety margin for possible delay.

The time of transport varies widely from day to day for long-distance shipments according to the ship which happens to be

sailing on that particular day. Thus, shipment to and from New York takes four to five days when the fastest Ocean liners are available, while on some days it takes as much as eight to ten days. The difference is even wider for South America and the Far East.

There are also incidental expenses, such as the cost of transport from the central banks to the boats where such costs are not included in the freight rate quoted, or packing when it is not done by the central banks, gratuities, and other small outlays. They can only be estimated approximately, and even the most experienced cambists are liable to surprises in this respect.

It may be seen from the foregoing that it is impossible to make calculations of gold points which can claim to be valid for any length of time. For this reason the calculations included in this Appendix are meant to be only formulae subject to adjustment when the factors determining the gold points change. To facilitate the adjustment of the gold points thus calculated, the extent to which they are modified by the changes of their factors is also indicated.

In our calculation it is assumed that the shipment is made in the most favourable circumstances. Thus nothing is allowed for brokerage, as it is assumed that the transactions are carried out either by firms having offices in both centres, or by two firms working on joint account. The freight is calculated on the basis of the lowest quotation obtainable at the time of writing. The rate of insurance is the normal rate quoted for shipments involving no exceptional risk. The amount insured is the purchase price plus expenses, increased to the nearest round figure. The rate of interest is in every case 5 per cent (apart from the pre-war gold points of the dollar), but there are tables to indicate the modification of gold points with the change of the rate of interest. Nothing is allowed for possible abnormal delays. It is also assumed that the shipment is financed in the market where the rate of interest is lower, and that it is a genuine exchange transaction, so that there is no need for covering the exchange risk by forward exchange operations. It would be, indeed, impossible to allow for the cost of the forward exchange

transaction, owing to the great variety of the possible forward rates.

The most important gold points are, of course, those of the sterling-dollar exchange. Owing to the frequency of gold shipments between London and New York, these are ascertained with a comparatively high degree of accuracy. Freight rates are now stabilised at 3s. per £100, while insurance rates are more or less settled at 1s. per £100. The buying and selling price in the United States is identical at \$20·67183 per ounce of fine gold, while the Bank of England's buying price is 84s. 9·81818d. and its selling price is 84s. 11·45455d.

For the sake of comparison, we give below the calculation of the gold points of the dollar before the war and immediately after our return to the gold standard:

100,000 fine ounces of gold at 84s. 11·45455d.	£424,772	14	7
Freight, 3s. 9d. per £100 for £424,800	.	796	10 0
Insurance, 9d. per £100 for £428,000	.	160	10 0
Interest, 4 per cent for 8 days	.	372	8 4
Boxes and packing	.	16	0 0
		<hr/>	
		£426,118	2 11

100,000 ounces fine at \$20·67183	.	.	\$2,067,183
Incidental charges in New York	.	.	150
		<hr/>	
			\$2,067,033

Gold export point of the dollar in 1913: \$4·8509.

100,000 fine ounces of gold at 84s. 11·45455d.	£424,772	14	7
Freight, 3s. 9d. per £100 for £424,800	.	796	10 0
Insurance, 1s. per £100 for £428,000	.	214	0 0
Interest, 5 per cent for 8 days	.	465	10 5
Boxes and packing	.	16	0 0
		<hr/>	
		£426,264	15 0

100,000 fine ounces at \$20·67183	.	.	\$2,067,183
Incidental charges in New York	.	.	200
		<hr/>	
			\$2,066,983

Gold export point of the dollar in 1925: \$4·8491.

100,000 ounces of fine gold at \$20-67183 .	\$2,067,183-00
Freight, 3s. 9d. per £100 on \$2,068,000 .	3,877-50
Insurance, 9d. per £100 on \$2,075,000 .	778-15
Interest, 4 per cent for 8 days . . .	1,812-16
Incidental expenses	150-00

\$2,073,800-81

100,000 ounces at 84s. 9-81818d. . . £424,090 18 2

Gold import point of the dollar in 1913: 4-89.

100,000 ounces of fine gold at \$20-67183 .	\$2,067,183-00
Freight, 5s. per £100	5,170-00
Insurance, 1s. per £100	1,037-53
Interest, 5 per cent for 8 days . . .	2,265-20
Incidental expenses	200-00

\$2,075,855-73

100,000 ounces at 84s. 9-81818d. . . £424,090 18 2

Gold import point of the dollar in 1925: \$4-8949.

As is seen, the margin between gold points was wider immediately after the return to the gold standard than previous to its suspension. Subsequently, however, it declined considerably, and at present it is narrower than before the war. The difference is particularly striking if, in accordance with the rule adopted by some banks, interest is left out of calculation.

The following figures compare the gold points of the dollar at the end of 1930 with and without the inclusion of interest charges:

	Including Interest.	Excluding Interest.
100,000 fine ounces at 84s. 11-45455d. .	£424,772 14 7	£424,772 14 7
Freight, 3s. per £100 .	637 0 0	637 0 0
Insurance, 1s. per £100 .	214 0 0	214 0 0
Interest, 3 per cent for 7 days	234 8 1	..
Boxes and packing .	16 0 0	16 0 0
	<u>£425,874 2 8</u>	<u>£425,639 14 7</u>
Gold export point .	\$4-8534	\$4-8562

	Including Interest.	Excluding Interest.
100,000 fine ounces at \$20·67183	\$2,067·183·00	\$2,067,183·00
Incidental charges in New York	200·00	200·00
	<u>\$2,067·383·00</u>	<u>\$2,067,383·00</u>
100,000 fine ounces at 84s. 9·81818d. . . .	£424,090 18 2	£424,090 18 2
Less: Freight, 3s. per £100	637 0 0	637 0 0
Insurance, 1s. per £100	214 0 0	214 0 0
Interest, 3 per cent for 7 days	234 8 1	..
	<u>£423,004 10 1</u>	<u>£423,238 18 2</u>
Gold import point	\$4·8873	\$4·8846

Incidental charges in New York have been omitted, as in 1928 the Federal Reserve Bank delivered the gold free on board in New York.

A difference of 1 per cent in the rate of interest for eight days results in a difference of about ·09 c. in the gold point. The following table shows the yield of funds used for financing gold shipments, according to the exchange rate on the basis of which the shipment is made:

Gold Export.	Gold Import.	Yield.
\$	\$	Per cent.
4·8562	4·8846	Nil
4·8553	4·8855	1
2·8544	4·8864	2
4·8534	4·8873	3
4·8525	4·8882	4
4·8516	4·8891	5
4·8507	4·8890	6

A difference of one day in the time of transport on the basis of an interest of 3 per cent results in a difference of ·04 c. in the gold point.

A difference of 1s. per £100 in the freight or insurance rate is equivalent to a difference of about ·24 c. in the gold point.

There is no reason, however, to anticipate any material change in either of these items.

Since the official stabilisation of the franc, huge amounts of gold have been shipped to France, but no gold has been shipped from Paris to London through commercial transactions. Thus, while the gold export point of the franc has been amply verified by experience the figures indicating its gold import point are purely hypothetical. The following is the calculation of the gold export point of the franc:

32,150·725 ounces fine gold at 84s. 11·45455d.	£136,567 10 0
Freight, 1s. 1d. per £100	73 19 8
Insurance, 6d. per £100	34 5 0
Interest, 1 day, 3 per cent	11 4 8
Packing, 20 boxes	5 0 0
Customs	8 10 9
	<hr/>
	£136,700 10 1
	<hr/>
1000 kilos fine gold at 16,963·50	Frs. 16,963,500
Minting costs 2·20 per kilo of ·9 fineness	22,222
Assays $\frac{1}{10}$ per thousand	1,697
Incidentals	750
	<hr/>
Gold export point: Frs. 123·9117.	<u>Frs. 16,938,859</u>

Originally the minting charge was 40 francs per kilo of ·900 fine gold, but the Bank of France reduced it to 20 francs until further notice. The charge for assay is 50 francs per bar, but a certificate from a recognised refiner, or the guarantee of a recognised bank, is accepted in lieu of assay.

The following is the calculation of the gold import point of the franc:

1000 kilos of fine gold	<u>Frs. 16,963,500</u>
32,150·725 ounces fine gold at 84s. 9·81818d.	£136,348 6 0
Less : Freight, 1s. 1d. per £100	£80 3 0
Insurance, 6d. per £100	34 5 0
Interest, 1 day, 3 per cent	11 4 8
	<hr/>
	£136,222 3 4
	<hr/>
Gold import point: Frs. 124·5275.	<u><u>Frs. 124·5275</u></u>

A difference of 1 per cent in the rate of interest is equivalent to a difference of 0·0031 in the gold point. The following table

shows the yield of funds used for the financing of gold shipments according to the rate of exchange:

Gold Export.	Gold Import.	Yield per cent.
123-9210	124-5179	Nil
123-9179	124-5212	1
123-9148	124-5243	2
123-9117	124-5275	3
123-9086	124-5307	4
123-9055	124-5338	5
123-9024	124-5370	6

On the basis of 3 per cent interest rate, the difference of one day in the time of transport is equal to a difference of .0041 c. in the gold points. A difference of £10 in the cost of the shipment is equal to a difference of $\frac{3}{4}$ c. in the gold point.

The reichsmark played for some time an important part from the point of view of gold arbitrage. The official selling price of the Reichsbank is 2792 reichsmarks per kilo of fine gold. As, however, the Reichsbank monopolises in practice gold exports, the gold import point calculated on the basis of this selling price is purely theoretical. On the other hand, the buying price of 2784 reichsmarks fixed by the Reichsbank is actually operative, and the gold export point calculated on the basis of it has had ample opportunity to be tested by actual shipments.

The following is the calculation of the theoretical gold import point of the reichsmark:

1000 kilos of fine gold at 2792	.	.	RM.2,792,000
Packing . . . . .	.	.	100
			<hr/> RM. 2,792,100 <hr/>
32,150.725 ounces at 84s. 9-81818d. .	.	.	£136,348 6 0 $\frac{1}{2}$
Less : Transport, 1s. 4d. per £100 .	.	.	91 1 2
Insurance, 9d. per £100 .	.	.	51 7 6
Interest, 3 per cent for 3 days .	.	.	33 14 1
			<hr/> £136,172 3 3 $\frac{1}{2}$ <hr/>

Gold import point: RM. 20-5042.

. As is known, the Reichsbank accepts the delivery of gold either in Berlin or at its Bremen, Hamburg, or Cologne branches. By this means the gold export point has been modified in favour of shipments to Germany. The extent of the difference is shown by the following calculation:

	Shipment to					
	Berlin.			Bremen.		
32,150·725 ounces at 84s. 11·45455d.	£136,567	10	3	£136,567	10	3
Transport (1s. 4d. for Berlin, 1s. 1d. for Bremen)	91	1	2	73	19	8
Insurance, 9d.	51	7	6	51	7	6
Interest, 3 per cent (3 days for Berlin, 2 days for Bremen)	33	14	1	22	9	5
Packing and boxes	5	0	0	5	0	0
	£136,748	12	0	£136,720	6	10
1000 kilos of fine gold at RM. 2784	RM. 2,784,000					
Gold export point	RM. 20·3584			RM. 20·3626		

Thus the difference is nearly one point, which is, in certain circumstances, capable of causing considerable gold shipments. The expenses of shipment to Cologne by air are about the same as for Bremen. Those for Hamburg are slightly higher.

A difference of 1 per cent in the rate of interest is equal to a difference of 0·0011 in the gold point for shipments to Bremen, requiring two days, and to 0·0017 for shipments to and from Berlin, which require three days. The following table indicates the yield of the funds employed for the financing of gold shipments according to the exchange rate on the basis of which the shipments were made:

Gold Export to Bremen.	Gold Export to Berlin.	Gold Import from Berlin.	Yield per cent.
20·3660	20·3635	20·4991	Nil
20·3648	20·3618	20·5008	1
20·3637	20·3601	20·5025	2
20·3626	20·3584	20·5042	3
20·3615	20·3567	20·5059	4
20·3604	20·3550	20·5076	5
20·3592	20·3553	20·5093	6

A difference of 1d. per £100 in the freight or insurance rate is equal to about 0·0008 in the rate. A difference of one day in the time of transport on the basis of an interest of 3 per cent is equal to 0·0016 in the rate.

The gold points of the Amsterdam exchange are also known with comparative accuracy, especially the gold export point, which played an important part soon after the restoration of the gold standard.

The following figures show the calculation of the gold export point:

32,150·725 ounces fine gold at 84s. 11·45455d.	£136,567 10 3
Transport, 1s. 1d. per £100	73 19 8
Insurance, 6d. per £100 on £137,000	34 5 0
Packing	5 0 0
Interest, 1 day, 3 per cent	11 4 8
Interest, 14 days, 3 per cent on one-tenth of the amount	15 14 5
	<hr/>
	£136,702 14 0
	<hr/>
1000 kilos at Fls. 1647·50	Fls. 1,647,500
80 assays at Fls. 3·50	280
	<hr/>
	Fls. 1,647,220
	<hr/>

Gold export point: Fls. 12·0496.

The following is the calculation of the gold import point of the Amsterdam exchange:

1000 kilos at 1653·44	Fls. 1,653,440
	<hr/>
32,150·725 ounces at 84s. 9·81818d.	£136,348 6 0½
Less: Transport, at 1s. 1d.	73 19 8
Insurance, 6d. per £100	34 5 0
Interest, 1 day, 3 per cent	11 4 8
	<hr/>
	£136,228 16 8½
	<hr/>

Gold import point: Fls. 12·1372.

Taking one day for the time of transport, a difference of 1 per cent in the rate of interest is equal to a difference of 0·0007 in the gold export point and 0·0004 in the gold import point. The following table shows the yield of funds used for the financing of gold shipments, according to the exchange rates on the basis of which the shipments were made:

Gold Export.	Gold Import.	Yield per cent.
12-0517	12-1360	Nil
12-0510	12-1364	1
12-0503	12-1368	2
12-0496	12-1372	3
12-0489	12-1376	4
12-0482	12-1380	5
12-0475	12-1384	6

On the basis of a rate of interest of 3 per cent, the difference of one day in the time of shipment is equal to a difference of 0-0012 in the gold points. A difference of £10 in the cost of shipment is equal to a difference of 0-0011 in the gold points.

There is an arrangement between the Java Bank and the Netherlands Bank which tended to bring about heavy gold shipments from London to Amsterdam towards the end of 1925. The Java Bank keeps a gold deposit with the Netherlands Bank, against which it is entitled to issue notes. If convenient, it accepts the delivery of gold at its Amsterdam deposit. At the end of 1925, when the Batavia rate declined below 12, as a result of the rubber boom, gold was shipped from London to Amsterdam, though neither the Amsterdam nor the Batavia exchanges were under their gold points, which are 12-0496 and 11-96 respectively. As the Batavia exchange was, however, under the gold point of the Amsterdam exchange, it was profitable to take gold to Amsterdam and pay it into the Java Bank's deposit with the Netherlands Bank. Should the Batavia exchange depreciate beyond the gold import point of the Amsterdam exchange, then, in theory at least, it would be profitable to take gold for London from the Java Bank's Amsterdam deposit. In practice, however, the Java Bank may refuse to accept or pay out gold in Amsterdam, so that the arrangement would work in both directions only if it is convenient to the Java Bank. Thus if it does not wish to lose gold all it has to do is to refuse to sell gold from its Amsterdam reserve, in which case it would not lose gold until the Batavia rate has depreci-

ated beyond its own gold import point, which is probably around 12·26.

Gold shipments for Canada are made in the shape of sovereigns, as these are accepted by the Receiver-General of the Dominion Treasury at their par value. Thus while bar gold would have to be delivered at the Ottawa Mint, sovereigns may be delivered in Montreal or at the port of St. John's.

There are two alternative routes by which sovereigns can be shipped to and from Canada, viz. direct to Montreal or via New York. For shipment via New York 8 days have to be allowed, while it is safe to allow equally 8 days for direct shipments to and from Montreal. During the winter months, while the St. Lawrence is frozen and Montreal is unapproachable by boat, the route via New York is cheaper for shipments from Canada, but it makes no difference for shipments to Canada, as the Receiver-General is prepared to accept delivery at the port of St. John's.

A point worth mentioning is that, though the Canadian dollar is equal to the United States dollar, the official parity of sterling in Canada is not 4·8665 but $4·86\frac{2}{3}$, which means that sovereigns are bought and sold at a nominal premium amounting to nearly \$170 for £1,000,000. On the other hand, sovereigns are bought according to their weight, which may result in a loss on worn coins. For this reason the shipment of sovereigns to Canada always involves a certain amount of risk which should be borne in mind.

The following is the calculation of the gold export point of the Canadian dollar:

500,000 sovereigns	.	.	.	.	£500,000	0	0
Freight, 3s. per £100	.	.	.	.	750	0	0
Insurance, 1s. per £100	.	.	.	.	250	0	0
Interest, 3 per cent for 8 days	.	.	.	.	328	18	8
Packing, 500 boxes	.	.	.	.	25	0	0
					<u>£501,358</u>	<u>18</u>	<u>8</u>
500,000 sovereigns at $4·86\frac{2}{3}$	.	.	.	.	\$2,433,333	33	
Incidental charges	.	.	.	.		200	00
						<u></u>	<u></u>
Gold export point, \$4·8531.						<u>\$2,433,133</u>	<u>33</u>

The following is the calculation of the gold import point of the Canadian exchange :

500,000 sovereigns at 4·86 $\frac{1}{2}$		\$2,433,333·33
Packing and incidental charges		325·00
		<hr/>
		\$2,433,658·33
		<hr/>
Less: Freight, 3s. per £100		£750 0 0
Insurance, 1s. per cent		250 0 0
Interest, 3 per cent for 8 days		353 18 8
		<hr/>
Gold import point: \$4·8805		£498,646 1 4
		<hr/>

A difference of 1 per cent in the rate of interest is equivalent to a difference of about ·0008 c. in the gold point. The following table shows the yield of funds used for the financing of gold shipments according to the exchange rate on the basis of which the shipment was made:

Gold Export.	Gold Import.	Yield per cent.
4·8555	4·8783	Nil
4·8547	4·8791	1
4·8539	4·8797	2
4·8531	4·8805	3
4·8523	4·8813	4
4·8515	4·8821	5
4·8507	4·8829	6

A difference of one day in the time of transport on the basis of an interest of 3 per cent results in a difference of ·0006 c. in the gold point.

As in the case of the American dollar, a difference of 1s. per £100 in the freight and insurance rate is equivalent to a difference of 0·24 c. in the gold points.

Although Spain is not on a gold basis, gold has been shipped there through commercial transactions during the last few years as a result of the policy of the authorities to encourage the payment of customs duties in gold. The alternative method of payment is in paper pesetas, in which case a "surcharge" is

added to the amount of gold pesetas payable. If the authorities want to encourage the influx of gold all they have to do is to fix the surcharge higher than the premium of gold pesetas against paper pesetas, in which case it is advantageous to discharge the payment by sovereigns, which are accepted at their par value.

The following is the calculation of the cost of the shipment of sovereigns taken by aeroplane to Paris and then by train to Irun (the frontier station) or to Barcelona:

	Irun.			Barcelona.		
10,000 sovereigns . . .	£10,000	0	0	£10,000	0	0
Transport (12s. 6d. for Irun, 14s. 6d. for Barcelona) .	62	10	0	72	10	0
Insurance, 1s. 3d. per cent .	6	5	0	6	5	0
Packing, incidental charges .	1	5	0	1	5	0
Interest, 3 per cent (2 days for Irun, 3 days for Barcelona) .	1	14	11	2	12	5
	<hr/> £10,071 14 11 <hr/>			<hr/> £10,082 12 5 <hr/>		

If the premium of sterling against pesetas is lower than the official "surcharge", and if the difference exceeds 0·727 per cent, it is worth while to make the payments due at Irun for customs duties in sovereigns instead of paper pesetas. If the difference exceeds 0·841 per cent it is worth while to make also the payments due in Barcelona in sovereigns. The surcharge is altered at frequent intervals, and the peseta exchange is also subject to wide fluctuations. For this reason there is no fixed rate at which it becomes profitable to ship gold to Spain.

As was pointed out already, calculations of gold points are subject to frequent changes. The figures contained in this Appendix merely claim to serve as a guide in the calculation of the gold point which has to be made on every occasion before a shipment is undertaken. Commercial firms, and even banks desirous of shipping gold, may find it advantageous to avail themselves of the services of bullion brokers, who are in a better position than anyone else to follow closely the changes in the factors that determine gold points. It is true that the commission of bullion brokers lowers the gold export point and raises the gold import point, and prevents shipments which would

otherwise appear profitable if undertaken without the middlemen. In spite of this, it is desirable that gold shipments should be made through bullion brokers. Apart from the fact that the advice of specialised brokers tends to reduce the risk attached to gold shipments, it saves the shippers the inconvenience of having to attend to the details of the transaction.

APPENDIX II

'OPEN MARKET' GOLD'S IMPORT AND EXPORT POINTS

THE term gold points, as it is understood in everyday use, refers to the rates of exchange at which it becomes profitable to import or export gold to and from the central bank's gold reserve. In every country on a gold basis, apart from Great Britain, the only buying and selling price of gold for arbitrage are those fixed by the central bank. In this country, however, there is, in addition to the official buying and selling price of gold, also a market price which varies between 84s. 10d. and 84s. 11½d. There is therefore a scale of gold points, indicating the rates at which it becomes profitable to buy gold in the open market for export, or at which it becomes profitable to import gold with a view to selling it in the open market. These gold points are generally regarded as less important than those based on the Bank of England's buying and selling price, because of the limited market supply available, and because the demand at a price superior to the Bank of England's buying price is usually limited. Undoubtedly, the significance of the gold import points based on market prices is small. The demand in the open market and the market price is not known in advance, so that the importer runs the risk of having to sell his gold at the Bank of England's buying price. On the other hand, the significance of the gold export points of open market gold should not be underestimated. After all, it is these gold points that determine whether or not the South African gold arrivals find their way to the central institution. It is true that the amount that may be shipped to and from the Bank at any given moment is much larger than the amount that may be bought or sold in the open market. In the long run, however, the Bank's reserve is deter-

mined to the same extent by its capacity of buying South African gold as by its capacity of defending its reserve and of attracting gold from foreign centres. For this reason, and also on account of the frequency of shipments of gold bought in the open market, we propose to give below the open market gold export points of the exchanges, the official export points of which have been indicated in Appendix I. The rate of interest is in every case 3 per cent.

Market Price.	New York.	Germany (Bremen).	Amsterdam.	Paris.
84s. 10d.	4.8606	20.3927	12.0674	124.0773
84s. 10½d.	4.8594	20.3869	12.0649	124.0494
84s. 10¾d.	4.8581	20.3811	12.0623	124.0215
84s. 10¾d.	4.8569	20.3753	12.0572	123.9936
84s. 11d.	4.8557	20.3695	12.0548	123.9657
84s. 11¼d.	4.8545	20.3637	12.0521	123.9378
84s. 11½d.	4.8533	20.3580	12.0494	123.9099

The effect of the changes in the rate of interest is the same as for the official gold points, as indicated in Appendix I. Any other changes in the calculation of the official gold points result in a corresponding modification of above table.

APPENDIX III

COST OF GOLD TRANSPORT BY AIR

As was pointed out in Chapter V., air lines proved fierce competitors of railway companies and shipping companies for gold transports to Continent. The advantage is particularly marked for small quantities, for which reason transport by air plays a comparatively more important part for gold bought by the trade.

The following figures compare the cost of gold transport by air with that of transport by sea and rail:

RATES PER KILO. GROSS WEIGHT

	By Air.	By Sea and/or Rail (passenger service).	
	100 kilos.	100 kilos.	200 kilos.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Amsterdam . . .	1 10	2 0	1 9
Basle	3 1	4 0	3 6
Belgrade	6 6	8 9	8 0
Berlin	3 8	3 10	3 8
Berne	3 7	4 0	3 6
Brussels	2 0	2 9	2 6
Bucharest	7 9	8 3	8 0
Budapest	6 4	7 0	6 9
Copenhagen	3 7	6 9	6 0
Madrid	22 0	37 0	34 0
Marseilles	6 3	7 6	6 3
Paris	2 6	5 0	4 7
Prague	5 1	5 3	4 10
Rome	8 0	8 9	8 6
Vienna	4 9	5 0	4 9
Warsaw	6 10	8 0	7 9

APPENDIX IV

BANK OF ENGLAND'S GOLD TRANSACTIONS ON FOREIGN ACCOUNT

THE following table shows the total purchases and sales of the Bank of England on foreign account:

Year.	Purchase.	Sale.	Difference.
1881	£4,175,000	£6,515,000	- £2,340,000
1882	7,407,000	4,968,000	+ 2,439,000
1883	4,418,000	3,394,000	+ 1,014,000
1884	5,170,000	5,436,000	- 266,000
1885	6,567,000	5,969,000	+ 598,000
1886	2,923,000	6,303,000	- 3,380,000
1887	3,832,000	3,028,300	+ 803,700
1888	6,291,000	6,352,000	- 61,000
1889	7,278,000	5,126,000	+ 2,152,000
1890	13,774,500	5,669,000	+ 8,105,500
1891	11,941,000	13,515,000	- 1,574,000
1892	5,051,000	5,483,000	- 432,000
1893	6,488,000	8,552,000	- 2,064,000
1894	14,504,500	5,798,000	+ 8,706,500
1895	17,266,000	3,034,000	+ 14,232,000
1896	5,758,000	13,127,000	- 7,369,000
1897	4,330,000	5,390,500	- 1,060,500
1898	10,549,000	8,602,000	+ 1,947,000
1899	13,274,000	6,150,000	+ 7,124,000
1900	12,330,000	7,794,000	+ 4,536,000
1901	7,985,000	5,216,000	+ 2,769,000
1902	6,023,000	6,417,000	- 396,000
1903	6,257,000	9,284,000	- 3,027,000
1904	9,742,000	6,925,500	+ 2,816,500
1905	9,774,000	8,800,000	+ 994,000

[Continued on next page]

APPENDIX IV.—*continued*

Year.	Purchase.	Sale.	Difference.
1906	20,206,500	15,535,000	+ 4,671,500
1907	19,288,000	12,926,000	+ 6,362,000
1908	3,682,000	7,661,000	- 3,979,000
1909	19,165,000	11,046,900	+ 8,119,000
1910	18,550,000	14,488,000	+ 4,062,000
1911	16,501,000	8,228,000	+ 8,273,000
1912	12,996,000	9,669,500	+ 3,326,500
1913	21,690,000	7,943,000	+13,747,000
1914	58,247,000	8,027,000	+50,220,000
1915	24,269,000	43,076,000	-18,807,000
1916 ¹	19,828,000	2,360,000	+17,468,000
1925 ²	15,362,000	26,957,000	-11,595,000
1926	23,947,000	17,676,000	+ 6,271,000
1927	25,927,000	20,654,000	+ 5,273,000
1928	35,631,000	36,953,000	- 1,322,000
1929	52,700,000	60,929,000	- 8,229,000
1930	44,331,000	44,725,000	- 396,000

¹ Up to July 16.² From April 29.

APPENDIX V

GOLD IMPORTS AND EXPORTS

THE following table shows the gold imports and exports of the United Kingdom since the establishment of Customs statistics:

Year.	Imports.	Exports.	Difference.
1852	..	£4,325,824	..
1853	..	12,751,778	..
1854	..	16,552,845	..
1855	..	11,847,213	..
1856	..	12,038,299	..
1857	..	15,061,500	..
1858	£22,793,126	12,567,040	+ £10,226,086
1859	22,297,698	18,081,139	+ 4,216,559
1860	12,584,684	15,641,578	- 3,056,894
1861	12,163,937	11,238,372	+ 925,565
1862	19,903,704	16,011,963	+ 3,891,741
1863	19,142,665	15,303,297	+ 3,839,368
1864	16,900,951	13,279,739	+ 3,621,212
1865	14,485,570	8,493,332	+ 5,992,238
1866	23,509,641	12,742,059	+ 10,767,582
1867	15,800,159	7,889,030	+ 7,911,129
1868	17,136,177	12,708,308	+ 4,427,869
1869	13,770,812	8,473,699	+ 5,297,113
1870	18,806,728	10,013,521	+ 8,793,207
1871	21,618,924	20,698,275	+ 920,649
1872	18,469,442	19,748,916	- 1,279,474
1873	20,611,165	19,071,220	+ 1,539,945
1874	18,081,019	10,641,636	+ 7,439,383
1875	23,140,834	18,648,296	+ 4,492,538
1876	23,475,975	16,515,748	+ 6,959,747
1877	15,441,985	20,373,886	- 4,931,901
1878	20,871,410	14,968,507	+ 5,902,903
1879	13,368,675	17,578,818	- 4,210,143
1880	9,454,861	11,828,822	- 2,373,961
1881	9,963,006	15,498,837	- 5,535,831
1882	14,376,559	12,023,804	+ 2,352,755
1883	7,755,800	7,091,365	+ 664,435
1884	10,744,408	12,012,839	- 1,268,431
1885	13,376,561	11,930,818	+ 1,445,743
1886	13,392,256	13,783,706	- 391,450
1887	9,955,326	9,323,614	+ 631,712
1888	15,787,588	14,944,143	+ 843,445

APPENDIX V.—*continued*

Year.	Imports.	Exports.	Difference. .
1889	17,914,039	14,455,318	+ 3,458,721
1890	23,568,049	14,306,688	+ 9,261,361
1891	30,275,620	24,167,925	+ 6,107,705
1892	21,583,232	14,832,122	+ 6,751,110
1893	24,834,727	19,502,273	+ 5,332,459
1894	27,572,347	15,647,551	+ 11,924,796
1895	36,009,329	21,369,323	+ 14,640,006
1896	24,468,580	30,123,925	- 5,655,343
1897	30,808,858	30,808,571	+ 287
1898	43,722,960	36,590,050	+ 7,793,910
1899	32,533,497	21,536,052	+ 10,997,445
1900	26,190,873	18,397,459	+ 7,793,414
1901	20,715,628	13,965,265	+ 6,750,363
1902	21,629,049	15,409,028	+ 6,220,021
1903	28,657,393	27,766,512	+ 890,881
1904	33,876,588	33,039,138	+ 839,450
1905	38,567,895	30,829,842	+ 7,738,053
1906	46,042,590	42,617,267	+ 3,425,323
1907	57,088,547	50,866,009	+ 6,222,538
1908	46,145,314	49,969,099	- 3,823,785
1909	54,691,829	47,249,536	+ 7,442,293
1910	57,321,767	50,898,445	+ 6,423,322
1911	48,693,753	40,100,540	+ 8,593,213
1912	52,688,881	46,538,469	+ 6,150,412
1913	59,533,549	46,087,359	+ 13,446,190
1914	58,642,211	30,599,050	+ 28,043,161
1915	10,828,366	39,218,113	- 28,389,747
1916	17,790,302	38,338,912	- 20,658,610
1917	..	..	..
1918	..	..	..
1919	..	..	..
1920	50,678,283	92,565,137	- 41,886,854
1921	49,676,047	59,348,158	- 9,672,111
1922	34,542,167	44,838,292	- 10,296,125
1923	43,986,655	57,434,355	- 13,447,700
1924	35,791,664	49,419,607	- 13,627,943
1925	41,460,892	49,674,766	- 8,213,874
1926	38,547,498	27,128,223	+ 11,419,275
1927	32,447,287	28,153,357	+ 4,293,930
1928	47,808,055	60,523,701	- 12,714,646
1929	62,411,414	77,572,219	- 15,160,805
1930	86,658,814	81,791,893	+ 4,866,921

APPENDIX VI

ORIGIN AND DESTINATION OF GOLD IMPORTS AND EXPORTS SINCE 1925

THE following tables, compiled from official statistics, show the principal countries of consignment and destination of the gold shipments of the United Kingdom since 1925:

IMPORTS

Country.	1925.	1926.	1927.	1928.	1929.	1930.
Arabia .	..	..	£250,000	£281,000	..	..
Australia .	£1,068	£8,750	..	1,005,694	£5,055,484	£23,922,188
Austria .	..	238	..	..	..	..
Belgium .	..	595,736	18,591	37	..	941
B. West Africa	1,236,813	1,293,108	966,903	695,293	866,293	1,042,848
Canada .	69,758	..	..	979,000	..	..
Denmark .	..	..	402,064	..	..	..
Dutch Indies	..	22,828	..	..	..	..
Egypt .	..	..	..	269,035	..	..
France .	123,983	164,897	128,987	187,494	424,591	302,050
Germany .	..	5,811	39,112	52,946	658,093	1,505
Gibraltar .	..	54	..	..	..	..
Ireland .	..	..	..	693,364	163,148	..
Italy .	..	..	74	..	..	..
Kenya .	..	3,625	..	..	..	..
Netherlands	5,094,795	241,405	475,268	29,727	2,955,387	3,964
Poland .	2,036,736	..	..	..	..	..
Rhodesia .	2,081,978	2,022,494	1,224,300	1,084,991	953,730	1,067,999
Roumania .	..	..	823,890	..	..	..
Russia .	4,277,385	2,537,492	215,566	3,818,397	..	..
South America	10,660	..	414,421	239,695	8,040,560	11,901,709
Spain .	..	..	90	2,000,065	781	6,006,235
Straits Settl.	..	..	..	14,497	..	325,244
Sudan .	33,351	..	..	..	..	..
Switzerland	..	..	308	..	..	..
Union of S.A.	22,273,555	31,516,252	25,551,751	29,689,140	38,005,634	41,819,204
United States	4,275,633	67,082	1,760,353	6,684,840	4,744,740	58,203

EXPORTS

Country.	1925.	1926.	1927.	1928.	1929.	1930.
Arabia . .	..	..	£30,000	£10,000	..	..
Australia . .	£105,278	£1,055,960	817,800	1,270,124	£43	£463
Belgium . .	211,035	247,777	1,226,094	715,673	2,850,821	1,868,896
B. West Africa	49,330	7,451	4,025	3,286	1,708	2,244
British India	12,976,925	2,633,961	2,560,872	2,213,090	2,120,523	1,680,378
Canada . .	930,000	450,000	..	1,000,000	..	..
Ceylon . .	390,000	544,950	28,850	..	..	..
China . .	32,814	44,050	..	..	..	..
Denmark . .	..	..	5,775	..	..	..
Dutch Indies	220,095	8,850	..	64,180	..	..
Egypt . .	647,970	246,400	780,705	284,435	778,002	..
France . .	530,866	1,696,603	969,404	19,968,833	33,397,020	58,543,252
Germany . .	5,849,346	12,554,569	5,170,379	21,046,590	19,108,302	16,200,884
Gibraltar . .	68,070	15,000	..	..	..	..
Italy . .	60,000	..	76,953	154,105	806,240	262,966
Kenya . .	46,553	45,975	55,845	58,149	..	..
Netherlands	9,741,280	3,021,518	1,332,685	715,673	412,281	205,521
Poland . .	..	..	4,739,234	892,191	1,135,406	113,439
Roumania . .	..	..	..	715,200	..	..
Russia . .	380,648	1,057,000	1,588,820	..	..	..
South America . .	457,300	317,000	1,430,000	..	100	10,000
Spain . .	120,644	431,265	1,529,925	40,946	73,834	330,929
Straits Settl.	1,607,511	1,592,929	709,296	372,002	447,546	11,650
Sweden . .	200	..	53,376	500,848	500,685	..
Switzerland	5,053,760	871,599	1,276,657	2,772,716	2,215,275	4,765,130
United States	10,095,281	233,800	5,762,311	6,602,592	12,594,886	..

